WATTS®

WATER QUALITY & CONDITIONING PRODUCTS

Catalog #8

The biggest source book in the water quality improvement industry!

WATTS®
WATER QUALITY & CONDITIONING PRODUCTS

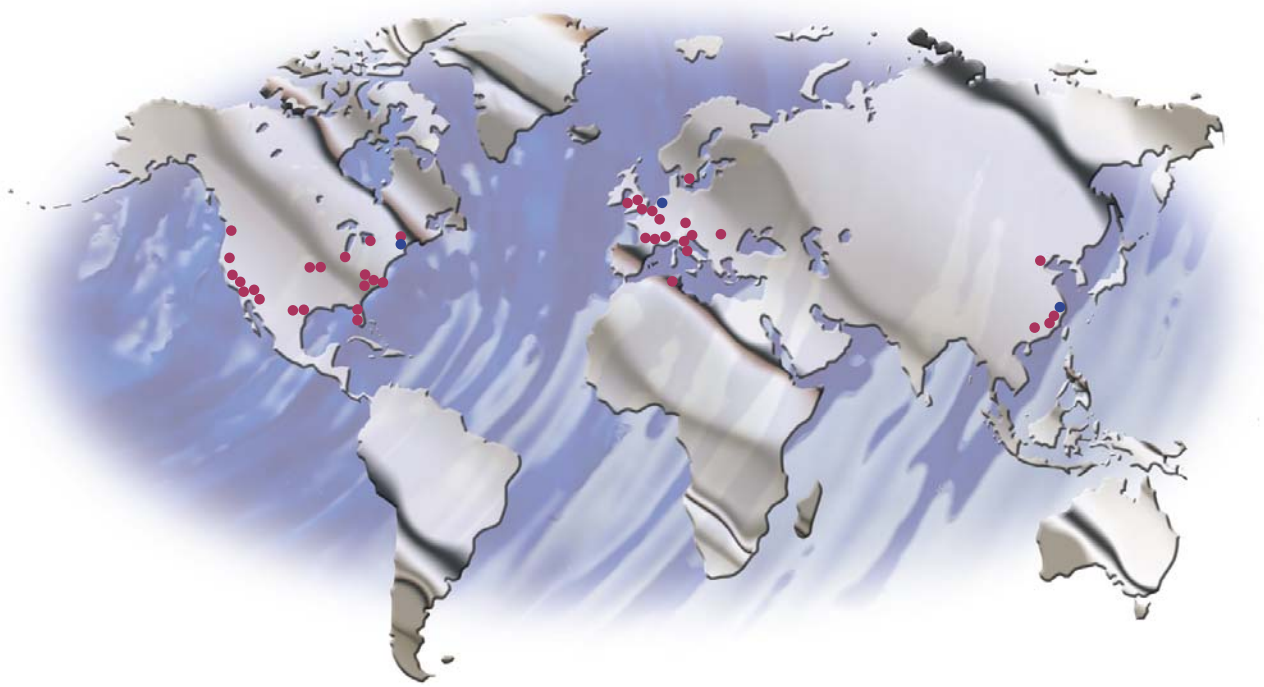
Dunnellon, Florida Distribution Center
(Formerly Flowmatic Systems, Inc.)

San Antonio, Texas Distribution Center
(Formerly Alamo Water Refiners)

Watts Water Technologies, Inc.

Watts Water Technologies was founded as the Watts Regulator Company by Joseph Watts in 1874, as he "set the standard" for valve technology. Today, Watts Water Technologies is a New York Stock Exchange Company, with over eighty facilities located worldwide. Watts Water is dedicated to providing the best consumer value for every product we supply.

Watts Worldwide Locations



Watts Water Quality & Conditioning Products

Our division was established after Flowmatic Systems and Alamo Water Refiners were acquired by Watts Water Technologies and combined both companies into a single unit. Today, Watts Water Quality & Conditioning Products has three distributions centers located in Dunnellon, Florida, San Antonio, Texas and Phoenix, Arizona and a will call facility in Tampa, Florida, to service customers on a local basis.

We are dedicated to providing top quality products, competitive prices, same-day shipping on most products and the best customer service in the business!

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Watts water conditioning equipment.

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These water softeners are stocked for same day shipping!

Select from a complete assortment of water softeners, which are in stock at all three distribution centers for immediate shipment.

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New RO systems with Kwik-Change™ cartridges. Ideal for firms who sell up-scale equipment to consumers who demand the "best".

Filtration systems with Kwik-Change™ cartridges for residential, commercial and cooler applications!

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Flowmatic brand

Watts 20" BB

Watts

Contents

C-MAX® carbon block cartridges.

Watts

Select from two product groups for top quality pleated cartridges at highly competitive prices!

Flow-Pro depth cartridges are available in a wide range of lengths and micron ratings. NSF component certified.

Flowmatic Waterminders™ and shut-off valves.

RO-PRO® storage tanks. (NSF)

PEX pipe from Watts. Low cost alternative to copper and CPVC!

Big-Bubba® non-matallic filters are ideal as a stand along filter or used to build your own filtration system.

We offer a complete line of commercial RO systems, for flow rates to 150 GPM. Units are assembled in San Antonio, Texas, USA.

Full line of stainless steel filters.

R-4x40

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Watts®

Water Conditioning Equipment

Watts® Authorized Dealer Program

The Watts water conditioning equipment featured in this section is sold through independent dealers, who are authorized to sell, install and service Watts brand equipment. Dealer authorizations are made on an exclusive, semi-exclusive and non-exclusive basis, depending on market size, dealer's volume potential, qualifications, credit rating and other factors. Authorized dealers are asked to sign an annual purchase agreement, which is based on each particular situation.

Dealer advantages

Authorized Watts dealers enjoy the following advantages:

- Exclusive, semi-exclusive or non-exclusive territories
- Top quality products
- Competitive prices
- Technical support
- Direct mail brochures
- Mailing services
- Sales leads
- Comprehensive warranties
- Dealer locator on web site
- Recognition plaque
- Sales aids and literature
- Window and store banners
- Authorization to use the Watts logo

Authorized dealers may use the Watts logo (see guidelines).

Direct mail brochures and mailing services

Authorized dealers may take advantage of our direct mail literature and mailing services to generate sales leads from consumers, who are located directly in their trading area. What can be better than a qualified sales prospect!

Free consumer literature

We offer free consumer literature to authorized Watts dealers to assist in their marketing efforts. All literature is four color and professionally designed.

Whole house water quality problems.

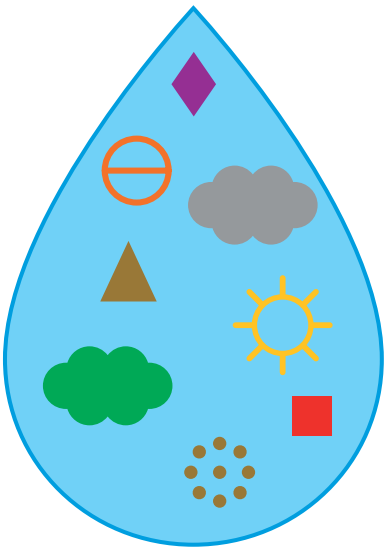
Hardness

Iron

Manganese

Arsenic

Tannin



Bad tastes

Foul odors

Chlorine and harmful chlorine by-products

Turbidity

Acidic water

The continuous water cycle . . .

Nature intended us to have high quality water. This is why we have the *continuous water cycle,* whereby water from our oceans, rivers, lakes and streams falls to the ground as rain or snow and becomes filtered as it seeps through the earth's surface. As the water works its way through the ground, however, it picks up minerals by dissolving limestone, causing water hardness. Water may also come into contact with Iron, Manganese, Arsenic and other contaminants, which cause additional water treatment problems.

The chart below lists typical whole house water quality problems and indicates which equipment effectively corrects any problems you may have in your home.

Water Quality Problems	Symptoms	Recommended Equipment
Hardness	Mineral deposits on dishes and glassware; stiff, dingy laundry; high soap usage and need for fabric softeners; dry, itchy skin and scalp; unmanageable hair; extra work to remove soap curd on bathtubs and shower stalls; high energy costs due to scale build-up in pipes and on appliances.	Water Softener.
Chlorine, foul odors and tastes	Chlorine taste; foul odors; damage to hair; itchy skin.	Backwashing filter using activated carbon.
Iron & Manganese	Unpleasant metallic tastes; rust particles; staining on plumbing fixtures; red water; odors.	Iron filter.
Turbidity	Cloudy water; sediment, sand, silt and rust particles.	Media filter.
Acidic water (low pH)	Green stains on bathroom sinks and other porcelain surfaces; blue green water. (Acidic water may cause corrosion of pipes & plumbing fixtures.)	Acid neutralizer using Calcite.
Tannin	Brownish, tea colored water; musty odors.	Tannin filter.
Arsenic	A naturally occurring element found in ground water, Arsenic is a carcinogen at high concentrations, and the EPA reports Arsenic may cause adverse health effects in low concentrations. Testing for Arsenic is highly recommended.	Arsenic Reduction System.

Watts® water softeners

"Hard" water is not considered unhealthy; however, hard water problems end up costing you money through increased soap usage, reliance on water softening products and shorter life for appliances due to scale build-up in pipes and other factors.

To correct water hardness, Watts offers a wide range of water conditioning systems, designed to improve water quality throughout your entire household.

Enjoy these many benefits Watts® water softeners provide.

- Spot-free glassware and dishes.
- No mineral deposits on bathtubs and shower stalls.
- Brighter, softer laundry.
- Less reliance on water softening products.
- Dramatic reduction in soap usage.
- Manageable hair because shampoo works better.
- Pipes remain free of calcium scale build-up.
- Extended life of appliances and reduced energy costs because scale is virtually eliminated.
- Spot-free car wash (if softened water is used).

Metered valve for greater efficiency

Our control valve is metered for greater efficiency and reduced salt usage, because regeneration of the softener resin is based on water consumption. Push button settings provide ease-of-use.

Model selection is typically based on water hardness, water usage, water source and other factors.

Two equipment types

Watts water softeners are available in two configurations, including:

Single tank

Single tank systems include one tank for the softening resin, a brine tank for salt, used to regenerate the softening resin and our metered control valve.

Dual tank

Dual tank systems come with an additional tank with activated carbon for pre-treatment, which removes chlorine, tastes and odors in municipal water applications and extend the life of the softening resin.

Models

Single tank models

Model Number	Capacity (Grains)	Valve Type	Connection Size	Mineral Tank	Brine Tank	Safety Float Valve*
M3011-W100SM	30,000	Metered	1"	9" x 48"	18" x 36"	Yes
M3013-W100SM	45,000	Metered	1"	10" x 54"	18" x 36"	Yes
M3015-W100SM	60,000	Metered	1"	12" x 52"	18" x 36"	Yes

Dual tank models

Model Number	Capacity (Grains)	Valve Type	Connection Size	Mineral Tanks		Brine Tank	Safety Float Valve*
				Top	Bottom		
M3011W100SM-ST1	30,000	Metered	1"	10" x 24"	10" x 35"	18" x 36"	Yes

*Prevents brine water overflow.

Bulk Program

Save big bucks when you buy in bulk!

Here's the deal

Order and take receipt of either 15 or 9 softener components at one time and save big bucks off the single unit price. Here's what you get:

30,000 and 45,000 grain softeners

- 15 control vaves
- 15 mineral tanks
- 15 brine tanks, with internals
- 15 by-pass valves
- 15 risers
- Resin for softeners purchased
- 150 pounds of gravel

60,000 grain softeners

You get 9 of everything listed, plus 18 cubic foot of resin and 200 pounds of gravel.

Ordering information

Part Number	Qty.	Capacity (Grains)	Valve	Mineral Tank	Brine Tank	By-Pass Valve	Resin Cubic Ft.	Gravel Pounds
M3011-W100SM-15	15	30,000	Metered	9x48	18x36	1"	15	150
M3013-W100SM-15	15	45,000	Metered	10x54	18x36	1"	22.5	150
M3015-W100SM-9	9	60,000	Metered	12x52	18x36	1"	18	200

* Resin and gravel installed. Single units packaged individually.

Spare Parts

Watts softeners require fewer and less expensive spare parts!

Spare parts for Watts valves (metered)

Part number	Description
KC11V3193-01	WS1 wrench
KC11V3107-01	Drive motor
KC11V3005	Spacer stack assembly
KC11V3011	Piston down-flow
KC11V3174	Regenerant piston
KC11V3003	Meter assembly
KC11V3150	Plumbing connection split ring
KC11V3105	Plumbing connection o-ring
KC11V3108	P.C. board for softener (five button, metered)
KC11V3108-TC	P.C. board for backwashing filter (three button, time clock)
KC11V3186	Transformer
KC12PKP10TS8	Tube insert
KC12V3192	Drain elbow nut
KC11V3191-01	Vertical adapter
KC12H4615	Locking clip
KC12H4650	1/2" nut with insert
WWC	Weather cover (white)

Watts® whole house filters for chlorine, taste, odor and sediment reduction.

Watts activated carbon filters are highly popular because they correct a wide range of water quality problems, by removing chlorine, tastes, odors and sediment.

Benefits

- Great tasting water from every tap in your house!
- No bad tastes!
- No foul odors!
- Crystal clear water for drinking, bathing and cooking!
- User-friendly equipment.
- Low maintenance due to automatic operation.

Models

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NC09-W100F	Timeclock	9X48	1.0	10	4	< 15	4.2	16X10X55
NC10-W100F	Timeclock	10X54	1.5	10	6	< 15	5.3	16X11X62
NC12-W100F	Timeclock	12X52	2.0	20	8	< 15	7.5	17X13X60
NC14-W100F	Timeclock	14X65	3.0	40	11	< 15	10	18X15X74
NC16-W100F	Timeclock	16X65	4.0	50	14	< 15	11	20X17X74
NC21-W100F	Timeclock	21X62	5.0	100	20	< 15	25	22X23X70

Whole house filters for sediment reduction with high efficiency Micro-Z™ filter media.

Watts filtration systems for sediment use our high performance Micro-Z filter media to provide increased loading capability and higher service flow rates. Micro-Z's unique Zeolite structure offers increased porosity to outperform conventional sand filters by reducing water consumption. The need to backwash is dramatically reduced!

Features & benefits

- Uses Micro-Z™ for increased solids loading.
- Unique structure allows for higher flow rates.
- Reduces water consumption because the need to backwash is dramatically reduced.
- Reliable equipment, designed for long-term service.

Models

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NM09-W100F	Timeclock	9X48	1.0	10	5/9	< 15/25	5.3	16X10X55
NM10-W100F	Timeclock	10X54	1.5	10	7/10	< 15/25	7.5	16X11X62
NM12-W100F	Timeclock	12X52	2.0	20	9/15	< 15/25	11	17X13X60
NM14-W100F	Timeclock	14X65	3.0	40	13/21	< 15/25	15	18X15X74
NM16-W100F	Timeclock	16X65	4.0	50	17/28	< 15/25	25	20X17X74

Watts® whole house filters for Iron and Manganese reduction.

Iron is one of the most common elements found in nature, and most ground waters contain a measurable amount of iron. Iron stains bathtubs, toilets, sinks, driveways and it will even stain the side of your house in sufficient concentrations. Watts offers two media types to remove Iron in point-of-entry applications.

Two media types

FILOX™

A non-chemical oxidizing media to reduce Iron.

Greensand-Plus™

An enhanced version of the traditional medium to remove Iron from water.

Filox™ system advantages

- Highest flow rate of any Iron removal media.
- No oxidizing chemicals needed for regeneration.
- High efficiency with 80% Manganese dioxide for enhanced performance and capacity.
- Effective, from 5.0 to 9.0 pH.
- System is easy to program, with 10 pre-programmed regeneration cycles to optimize water treatment.

Greensand-Plus™ system advantage

- Lower backwash requirements.
- Known saturation capacity.
- Higher temperatures and differential pressures than traditional Manganese Greensand.
- Greensand-Plus is also used for radium reduction.
- User friendly, low maintenance electronic time clock valve.

Note:
The use of chemicals and oxidizers, such as chlorine, potassium permanganate and oxygen may be required for both systems to provide the optimal treatment for Iron, Hydrogen Sulfide and Manganese.

Filox™ models

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NF09-W100F	Timeclock	9X48	1.0	10	6	< 15	5.3	16X10X55
NF10-W100F	Timeclock	10X54	1.5	10	9	< 15	7.5	16X11X62
NF12-W100F	Timeclock	12X52	2.0	20	12	< 15	10	17X13X60
NF14-W100F	Timeclock	14X65	3.0	40	18	< 15	15	18X15X74
NF16-W100F	Timeclock	16X65	4.0	50	24	< 15	20	20X17X74
NF21-W100F	Timeclock	21X62	5.0	100	27	< 15	25	22X23X70

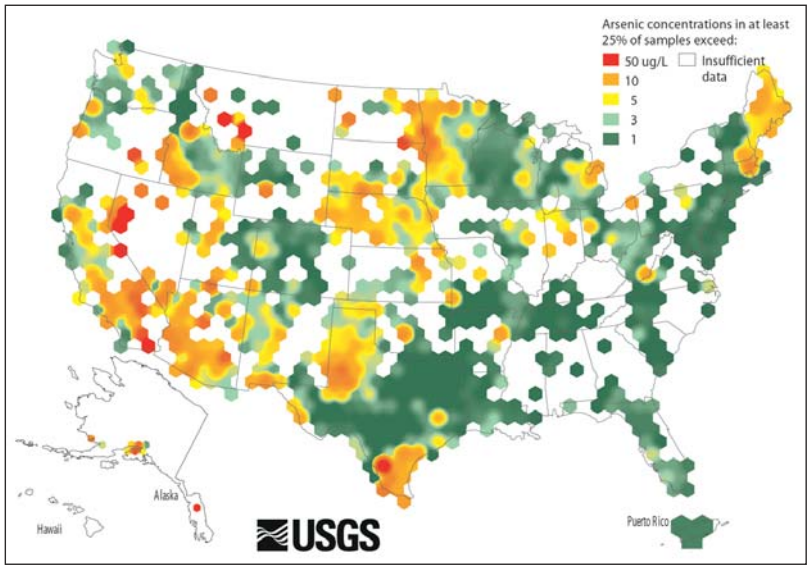
Greensand Plus™ models

Part Number	Valve	Mineral Tank Size	Media Cubic Ft.	Gravel (Lbs)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	Floor Space LxWxH
NGP09-W100F	Timeclock	9X48	1.0	10	3	< 15	5.3	16X21X55
NGP10-W100F	Timeclock	10X54	1.5	10	4	< 15	7.5	16X22X62
NGP12-W100F	Timeclock	12X52	2.0	20	5	< 15	10	17X24X60
NGP14-W100F	Timeclock	14X65	3.0	40	6	< 15	12	18X33X74
NGP16-W100F	Timeclock	16X65	4.0	50	7	< 15	20	20X35X74
NGP21-W100F	Timeclock	21X62	5.0	100	12	< 15	25	22X41X70

Watts™ whole house filters for Arsenic reduction using highly effective MEDIA G2R® for exceptional performance.

Arsenic is a naturally occurring element found in ground water in many parts of the world. The World Health Organization and the U.S. EPA recognize Arsenic as a carcinogen and have determined it may cause long-term adverse health effects in concentrations above 10 ppb.

Arsenic concentration map for the United States



Note: US map is not detailed enough to accurately reflect water quality in any specific area. We highly recommend testing for Arsenic.

Media G2R®

Media G2R® uses a patented process, whereby two components are combined to produce a unique water treatment media, which outperforms conventional Arsenic reduction materials. Media G2R® advantages are as follows:

- Adsorbs both Arsenic III and IV.
- NSF standard 61 certified.
- Performs over a wide range of pH, up to 8.
- Long life expectancy to reduce costs.
- Engineered for residential applications.
- Proven results!

Electronic control

A control valve with special electronics is used to determine when capacity has been reached. This provides assurance only safe water is being provided by the system.

Models

Model Number	Design Flow Rate (GPM)	Mineral Tank	Media Cu. Ft.
WARS10R	3.75	10" x 54"	1.5
WARS12R	5	12" x 52"	2
WARS14R	7.5	14" x 65"	3

Note: Systems come fully assembled with media installed.

Section 2

Water Conditioning Equipment

Stocked Softeners for Same Day Shipment

Our most popular models, stocked for immediate shipment

Model Number	Type	Capacity	Valve	Mineral Tank		Brine Tank	
				Color	Size	Color	Size
M2010-SD	Time clock	30,000	5600	Blue	9x48	Blue	18x40
M3011-SD	Metered	30,000	5600	Blue	9x48	Blue	18x40
M3011-70	Metered	30,000	7000	Almond	9x48	Almond	18x40
M3013-70	Metered	45,000	7000	Almond	10x54	Almond	18x40
M3015-70	Metered	60,000	7000	Almond	12x52	Almond	18x40
M1286	Cabinet (M)	30,000	5600	Brown, tan	Cabinet	Brown, tan	Cabinet

Note: Softeners listed above are assembled and include by-pass valve and safety float valve to prevent brine overflow.

Water Softeners with Fleck 5600 Valves

Our most economical models!

Water softeners with Fleck 5600 control valves are our best selling softeners because they are built right and priced right. Check out the specifications, features and benefits described below.

Specifications

Valve	Fleck 5600 top mount valve
Valve body	Glass reinforced Noryl®
Pipe size	3/4"
Types	Time clock and metered
By-pass	Included (stainless steel)
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- Economical pricing!
- Top quality components.
- Fully assembled, ready for installation.
- Models for capacities to 60,000 grains.
- User friendly Fleck 5600 control valves.
- Brine tanks with grid plate for maximum saturation of brine.
- Stainless steel by-pass valve is included.
- Safety brine valve with air check.

Time clock models (FT5600 valve)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M2010	30,000	3/4"	9x48	1	10	18x40	400	15-20	9-11	2.2	110
M2012	45,000	3/4"	10x54	1.5	15	18x40	400	18-23	10-13	2.7	130
M2014	60,000	3/4"	12x52	2	30	18x40	400	19-25	10-13	4.0	190

Metered models (FM5600 valve)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M3011	30,000	3/4"	9x48	1	10	18x40	400	15-20	9-11	2.2	110
M1286	30,000	3/4"	10x35	1	10	Cabinet	225	15-20	10-13	2.7	110
M3013	45,000	3/4"	10x54	1.5	15	18x40	400	18-23	10-13	2.7	130
M3015	60,000	3/4"	12x52	2	30	18x40	400	19-25	10-13	4.0	190

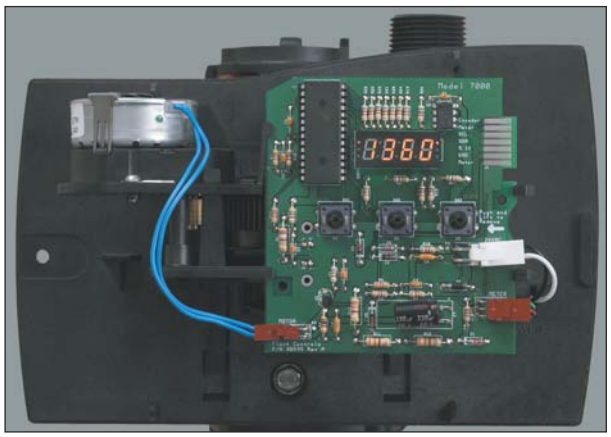
7000 Series Softeners With 1” - 1-1/2” Control Valves

Your best option for large homes

7000 series softeners are our fastest growing line of residential softeners because they appeal to consumers who own and builders who build larger homes, requiring 1”-1-1/2” pipe size.

Specifications

Valve	Fleck 7000 with SE electronics
Valve body	Glass reinforced Noryl® (1-1/4")
Valve type	Electronic - metered.
Pipe size	1"-1-1/2"
By-pass	By-pass included (MNPT).
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity



Features & benefits

- 1-1/4" valve for high flow / backwash rates.
- Easy to program Fleck 7000 valves.
- Variable brining is standard.
- Variable reserve is standard.
- Quick connect fittings (some connections).
- Models for capacities to 210,000 grains.
- Top quality components are used.
- Brine tanks with grid plate for maximum saturation of brine.
- 1-1/4" distribution system (standard).
- Safety brine valve with air check.
- Reliable optical electronics eliminates micro switch positioning.

Easy to program!

7000 Series electronic softeners are easy to program and are highly reliable, plus manual operation is possible should power be disrupted!

7000 Series Models

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M3011-70	30,000	1"-1-1/2"	9x48	1	10	18x40	400	15.2	15	2	110
M3013-70	45,000	1"-1-1/2"	10x54	1.5	15	18x40	400	16.4	15	2.4	130
M3015-70	60,000	1"-1-1/2"	12x52	2	30	18x40	400	20.5	15	3.5	190
M3017-70	90,000	1"-1-1/2"	14x65	3	60	18x40	400	21.9	15	5	240
M3019-70	120,000	1"-1-1/2"	16x65	4	80	18x40	400	23.4	15	7	320
M3021-70	210,000	1"-1-1/2"	21x62	7	100	24x41	700	25.0	15	11	585

Note: Brine tanks and mineral tanks are almond as standard. Other options are available. Please specify when ordering. Connectors available:1”, 1-1/4”, 1-1/2”, NPT.

Water Softeners with Autotrol® Valves

Features, which consumers prefer!

Water softeners with Autotrol® control valves are popular because they provide features and benefits customers are looking for. Select automatic time clock or metered models.

Specifications

Valve, time clock	Autotrol 255/440i and 268/440i
Valve, metered	Autotrol 255/460i and 268/960
Valve body	Noryl® plastic
Pipe size	3/4"-1"
By-pass	Noryl® plastic
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- Economical pricing!
- Top quality components
- Models for capacities to 60,000 grains
- Fully automatic regeneration
- Brine tanks with grid plate for maximum saturation of brine (18" only)
- By-pass included (some models)
- Air check

Time clock models

Part Number	Valve	Capacity (Max.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M1026	255/440	30,000	9x48	1	10 lbs.	14x34	225	8.8	15	2.2	83
M1114	268/440	30,000	9x48	1	10 lbs.	14x34	225	8.8	15	2.2	84
M15-1100B	268/440*	30,000	9x48	1	10 lbs.	18x33	320	9.9	15	2.2	84
M15-1150B	268/440*	45,000	10x54	1.5	15 lbs.	18x33	320	12.6	15	2.7	105
M15-1200B	268/440*	60,000	12x52	2	30 lbs.	18x40	400	14.3	15	4.0	117

*Order by-pass and tail pieces separately.

Metered models

Part Number	Valve	Capacity (Max.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M1068	255/460	22,000	8x44	0.75	8 lbs.	14x34	225	8.8	15	1.7	71
M1070	255/460	30,000	9x48	1	10 lbs.	14x34	225	8.8	15	2.2	84
M2010U	255/960	30,000	9x48	1	10 lbs.	18x40	400	10.0	15	2.2	100
M15-1100A	268/960*	30,000	9x48	1	10 lbs.	18x33	320	9.9	15	2.2	100
M15-1150A	268/960*	45,000	10x54	1.5	15 lbs.	18x33	320	12.6	15	2.7	105
M15-1200A	268/960*	60,000	12x52	2	30 lbs.	18x40	400	14.3	15	4.0	117

*Order by-pass and tail pieces separately.

Note: 255 systems ship with bypass and 3/4" PVC tail pieces. 268 systems ship with bypass and 1" PVC tail pieces, except where noted. Part K021265 is bypass for 268 softeners (requires tail pieces). PVC tail pieces for 255 softeners are part number K221040392 (3/4"). PVC tail pieces for 268 softeners are part number K221040393 (1"). Brine and mineral tanks are almond.

Backwashing Filters

Fully assembled backwashing filters with activated carbon or Micro-Z™

Backwashing filters come with Fleck or Autotrol valves, so you can select the filter best suited for your application!

Specifications

Valves	Fleck & Autotrol (see below).
Valve type	Time clock
Pipe size	3/4" and 1"(see below).
By-pass	(See below).
Mineral tanks	Corrosion resistant FRP. NSF.
Media	Activated carbon or Micro-Z

Backwashing filters with activated carbon for taste, odor, chlorine reduction

Part Number	Valve Mfg.	Valve Size	Pipe Size	Tank	Carbon (Cu. Ft.)	Size By-Pass	Service Flow Rate	Shipping Weight
N2050D	Fleck	FT5600	3/4"	9x48	1	3/4" SS	4.5	90
N2050A	Autotrol	263/440i	1"	9x48	1	1" PVC	4.5	90
N2050	Fleck	FT2510	3/4"	9x48	1	3/4"	4.5	90
N2051	Fleck	FT2510	3/4"	10x54	1.5	3/4"	5.4	105
N2052	Fleck	FT2510	3/4"	12x52	2	3/4"	7.8	117
N2051-1	Fleck	FT2750	1"	10x54	1.5	None	5.4	90
N2052-1	Fleck	FT2750	1"	12x52	2	None	7.8	105

Backwashing filters with Micro-Z™ media for sediment and solids reduction

Part Number	Valve Mfg.	Valve Size	Pipe Size	Tank	Media (Cu. Ft.)	Size By-Pass	Service Flow Rate	Shipping Weight
N5245-09	Fleck	FT2750	1"	9x48	1	None	5	110
N5245-10	Fleck	FT2750	1"	10x54	1.5	None	7	140
N5245-12	Fleck	FT2750	1"	12x52	2	None	9	167

Note: Tanks are almond.

LCTA-75 & LCTA-100 Twin Alternating Tank Softeners

Ideal softeners when soft water is required 24 / 7, without interruption.

Suitable for light commercial applications ranging from 20,000 to 120,000 grains of hardness removal capacity, at flow rates to 24 GPM.

Specifications

Valve	Fleck 9000 SE
Valve body	Brass
Pipe sizes	3/4" and 1"
Types	Metered
By-pass	Additional (LCTA-75 included)
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- Economical pricing!
- Top quality components
- Models for capacities to 120,000 grains
- Fleck 9000 SE control valves with "SE" electronics
- Brine tanks with grid plate for maximum saturation of brine
- Stainless steel by-pass valve is for LCTA-75 only
- Safety brine valve with air check.

LCTA-75 twin tank softeners with FM9000SE metered control valves

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M2058-SE	30,000	3/4"	9x48	1	15	18x40	400	13-19	15-25	2	230
M2059-SE	45,000	3/4"	10x54	1.5	20	18x40	400	14-21	15-25	2.4	290
M2060-SE	60,000	3/4"	12x52	2	30	18x40	400	15-21	15-25	3.5	420
M2063-SE	75,000	3/4"	13x54	2.5	45	18x40	400	15-21	15-25	4	460
M2066-SE	90,000	3/4"	14x65	3	60	18x40	400	17-22	15-25	5	500
M2069-SE	120,000	3/4"	16x65	4	80	18x40	400	17-24	15-25	7	650

LCTA-100 twin tank softeners with metered FM9000SE control valves

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M2058B-SE	30,000	1"	9x48	1	15	18x40	400	13-19	15-25	2	230
M2059B-SE	45,000	1"	10x54	1.5	20	18x40	400	14-21	15-25	2.4	290
M2060B-SE	60,000	1"	12x52	2	30	18x40	400	15-21	15-25	3.5	420
M2063B-SE	75,000	1"	13x54	2.5	45	18x40	400	15-21	15-25	4	460
M2066B-SE	90,000	1"	14x65	3	60	18x40	400	17-22	15-25	5	500
M2069B-SE	120,000	1"	16x65	4	80	18x40	400	17-24	15-25	7	650

LCTA-150 Twin Alternating Tank Softeners

Ideal softeners when soft water is required 24 / 7, without interruption.

Suitable for commercial applications ranging from 60,000 to 300,000 grains of hardness removal capacity, at flow rates to 49 GPM.

Specifications

Valve	Fleck 9500 SE
Valve body	Brass
Pipe sizes	1-1/2"
Types	Metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- Economical pricing!
- Top quality components
- Models for capacities to 300,000 grains
- Fleck 9500 SE control valves with "SE" electronics
- Brine tanks with grid plate for maximum saturation of brine (some models)
- Safety brine valve with air check.

LCTA-150 twin tank softeners with metered FM9500SE control valves

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M2218SE	60,000	1-1/2"	12x52	2	30	24x41	600	13-19	10-20	5	370
M2220SE	90,000	1-1/2"	14x65	3	60	24x41	600	14-21	15-30	7	550
M2222SE	120,000	1-1/2"	16x65	4	80	24x41	600	15-21	20-40	9	720
M2224SE	150,000	1-1/2"	18x65	5	100	24x41	600	15-21	25-48	12	900
M2228SE	210,000	1-1/2"	21x62	7	100	24x50	800	17-22	34-49	15	1215
M2235SE	300,000	1-1/2"	24x72	10	200	30x50	1200	17-24	37-49	15	1750

LC-100 Light Commercial Single Tank Softeners (1”)

Ideal for commercial applications with capacities to 120,000 grains.

LC-100 series softeners with Fleck 2750 brass control valves are our best selling light commercial softeners because they are ideal, considering price and performance!

Specifications

Valve	Fleck 2750 SE top mount valve
Valve body	Brass
Pipe size	1"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- Economical pricing!
- Top quality components.
- Models for capacities to 120,000 grains.
- User friendly Fleck 2750 control valves.
- Brine tanks with grid plate for maximum saturation of brine (some models).
- Safety brine valve with air check.

Time clock models (with FT2750SE brass valve without flow meter)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4040-SE	60,000	1"	12x52	2	10	18x40	400	15-20	15-25	4	200
M4042-SE	90,000	1"	14x65	3	15	18x40	400	18-23	15-25	5	240
M4046-SE	120,000	1"	16x65	4	30	18x40	400	19-25	15-25	7	320

Metered models (with FM2750SE brass valve with flow meter)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4040B-SE	60,000	1"	12x52	2	10	18x40	400	15-20	15-25	4	200
M4042B-SE	90,000	1"	14x65	3	15	18x40	400	18-23	15-25	5	240
M4046B-SE	120,000	1"	16x65	4	30	18x40	400	19-25	15-25	7	320

LC-150 Light Commercial Single Tank Softeners (1-1/2")

Ideal for commercial applications with capacities to 300,000 grains.

LC-150 series softeners with Fleck 2850 brass control valves are suitable for flow rates to 55 GPM. Models with time clock and metered controls are available.

Specifications

Valve	Fleck 2850 top mount valve
Valve body	Brass
Pipe size	1-1/2"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- 1-1/2" valves for high flow rates
- Top quality components
- Models for capacities to 300,000 grains
- User friendly Fleck 2850 control valves
- Brine tanks with grid plate for maximum saturation of brine (some models)
- Safety brine valve with air check.

Time clock models (with FT2850 brass valve)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4210SE	60,000	1-1/2"	12x52	2	30	18x40	400	15-20	15-25	4	210
M4214SE	90,000	1-1/2"	14x65	3	60	18x40	400	15-20	15-25	5	240
M4218SE	120,000	1-1/2"	16x65	4	80	18x40	400	20-40	15-25	7	320
M4222SE	150,000	1-1/2"	18x65	5	100	24x41	600	25-50	15-25	11	380
M4226SE	210,000	1-1/2"	21x62	7	100	24x50	800	28-53	15-25	13	585
M4230SE	300,000	1-1/2"	24x72	10	200	30x50	1400	30-55	15-25	15	710

Metered models (with FM2850 brass valve with flow meter)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4210BSE	60,000	1-1/2"	12x52	2	30	18x40	400	15-20	15-25	4	210
M4214BSE	90,000	1-1/2"	14x65	3	60	18x40	400	15-20	15-25	5	240
M4218BSE	120,000	1-1/2"	16x65	4	80	18x40	400	20-40	15-25	7	320
M4222BSE	150,000	1-1/2"	18x65	5	100	24x41	600	25-50	15-25	11	380
M4226BSE	210,000	1-1/2"	21x62	7	100	24x50	800	28-53	15-25	13	585
M4230BSE	300,000	1-1/2"	24x72	10	200	30x50	1400	30-55	15-25	15	710

LC-200 Light Commercial Single Tank Softeners (2")

Ideal for commercial applications with capacities to 600,000 grains.

LC-200 series softeners with Fleck 2900 brass control valves are suitable for flow rates to 105 GPM. Models with time clock and metered controls are available.

Specifications

Valve	Fleck 2900 top mount valve (2")
Valve body	Brass
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- 2" valves for high flow rates
- Top quality components
- Models for capacities to 600,000 grains
- User friendly Fleck 2900 control valves
- Brine tanks with grid plate for maximum saturation of brine (some models)
- Safety brine valve with air check.

Time clock models (with FT2900 brass valve)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4043-29NT	90,000	2"	14x65	3	60	18x40	400	15-30	15-25	5	265
M4047-29NT	120,000	2"	16x65	4	80	18x40	400	20-40	15-25	7	350
M4048-29NT	150,000	2"	18x65	5	100	24x41	600	57-65	15-25	10	400
M4052-29NT	210,000	2"	21x62	7	100	24x50	600	60-77	15-25	13	600
M4058-29NT	300,000	2"	24x72	10	200	30x50	1200	74-97	15-25	15	710
M4059-29NT	450,000	2"	30x72	15	400	39x48	2200	80-100	15-25	25	1160
M4060-29NT	600,000	2"	36x72	20	500	39x48	2200	84-105	15-25	35	1560

Metered models (with FM2900 brass valve with flow meter)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4043B-29NT	90,000	2"	14x65	3	60	18x40	400	15-30	15-25	5	265
M4047B-29NT	120,000	2"	16x65	4	80	18x40	400	20-40	15-25	7	350
M4048B-29NT	150,000	2"	18x65	5	100	24x41	600	57-65	15-25	10	400
M4052B-29NT	210,000	2"	21x62	7	100	24x50	600	60-77	15-25	13	600
M4058B-29NT	300,000	2"	24x72	10	200	30x50	1200	74-97	15-25	15	710
M4059B-29NT	450,000	2"	30x72	15	400	39x48	2200	80-100	15-25	25	1160
M4060B-29NT	600,000	2"	36x72	20	500	39x48	2200	84-105	15-25	35	1560

Note: twin, triplex, quadplex models available.

LC-300 Light Commercial Single Tank Softeners (3")

High flow commercial softeners with capacities to 1,050,000 grains.

LC-300 series softeners with Fleck 3900 brass control valves are suitable for flow rates to 280 GPM. Models with time clock and metered controls are available.

Specifications

Valve	Fleck 3900 top mount valve
Valve body	Brass
Pipe size	3"
Types	Time clock and metered
By-pass	None
Mineral tanks	Corrosion resistant FRP. NSF.
Brine tanks	Polyethylene; fully assembled
Media	Cation resin; high capacity

Features & benefits

- 3" valves for high flow rates.
- Top quality components.
- Models for capacities to 1,050,000 grains.
- 3900 controller operates on demand.
- Brine tanks with grid plate for maximum saturation of brine (some models).
- Safety brine valve with air check.

Time clock models (with FT3900 brass valve)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4110-39NT	300,000	3"	24x72	10	200	30x50	1400	120-170	15-25	15	1070
M4112-39NT	450,000	3"	30x72	15	400	39x48	2200	158-212	15-25	25	1600
M4114-39NT	600,000	3"	36x72	20	500	39x60	2700	185-250	15-25	35	2015
M4116-39NT	900,000	3"	42x72	30	700	42x60	3100	200-268	15-25	45	3245
M4118-39NT	1,050,000	3"	48x72	35	900	50x60	4500	213-280	15-25	60	4295

Metered models (with FM3900 brass valve with 3" strap on sensor)

Part Number	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
			Size	Resin Cubic Ft.	Gravel #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M4110B-39NT	300,000	3"	24x72	10	200	30x50	1400	120-170	15-25	15	1070
M4112B-39NT	450,000	3"	30x72	15	400	39x48	2200	158-212	15-25	25	1600
M4114B-39NT	600,000	3"	36x72	20	500	39x60	2700	185-250	15-25	35	2015
M4116B-39NT	900,000	3"	42x72	30	700	42x60	3100	200-268	15-25	45	3245
M4118B-39NT	1,050,000	3"	48x72	35	900	50x60	4500	213-280	15-25	60	4295

Note: twin, triplex, quadplex models available.

Heavy-Duty Steel Tank Commercial Softeners

Heavy duty softeners for heavy duty commercial applications!

Suitable for commercial applications ranging from 300,000 to 1,200,000 grains of hardness removal capacity and flow rates to 280 GPM. Models with time clock and meters available.

Specifications

Valve	(See below).
Valve body	Brass.
Pipe sizes	2" and 3" (see below).
Types	Time clock (meter optional).
By-pass	None
Mineral tanks	Epoxy lined steel interior.
Brine tanks	Brine maker / salt storage is PE.
Brine supply	Automatic brine refill.
Media	Cation resin; high capacity

Features & benefits

- Regeneration by time clock or meter
- Automatic brine refill by timer or controller
- Models for capacities to 1,200,000 grains
- Fleck control valves
- Steel tanks rated for 100 psi
- Exterior tanks primed for protection
- Face piping is galvanized
- Electronic controls are available
- All systems shipped with high capacity Cation resin

Heavy-duty steel tank commercial softeners

Part Number	Fleck Valve No.	Capacity (Max.)	Pipe Size (In.)	Mineral Tank			Brine Tank		Flow Rate & Pressure Drop			Shipping Weight (Lbs.)
				Size	Resin Cubic Ft.	Gravel 1/4x1/8 / #20 (Lbs.)	Size	Salt Fill (Lbs.)	Service Flow (GPM)	Drop (PSI)	Back Wash (GPM)	
M5076-29	2900	300,000	2"	20x60	10	100 / 100	30x50	900	68-94	15-25	15	1930
M5078-29	2900	450,000	2"	30x60	15	200 / 100	39x48	2200	72-102	15-25	25	2525
M5080-31	3150	600,000	2"	36x60	20	200 / 200	39x48	2200	78-107	15-25	35	2700
M5080-39	3900	600,000	3"	36x60	20	200 / 200	39x48	2200	185-250	15-25	35	2850
M5082-31	3150	900,000	2"	42x60	30	400 / 300	42x60	3000	84-118	15-25	45	4650
M5082-39	3900	900,000	3"	42x60	30	400 / 300	42x60	3000	200-268	15-25	45	4800
M5084-31	3150	1,200,000	2"	48x60	40	600 / 400	50x60	4500	87-120	15-25	60	4950
M5084-39	3900	1,200,000	3"	48x60	40	600 / 400	50x60	4500	213-280	15-25	60	4100

Note: All units are shipped from the factory, set at minimum capacity and minimum salt usage to reduce salt usage by 40%. Use the minimum capacity when sizing systems to gain salt savings, if desired. Water quality, TDS and other factors will influence performance and flow rates. End users should prepare a complete water analysis and consult the distributor, dealer or factory for technical support.

ASME mineral tanks, twin, triplex, quadplex models available.

Limited warranty: Softener components carry a one year limited warranty from installation date. Beginning of warranty period shall not exceed six months from manufacturing date.

Brine Tanks

Round Brine Tanks

Square Brine Tanks
(Easy to ship in quanity)

Round brine tanks

Part Number	Size	Tank Color	Cover Color	Cover Type	Description	Case Qty.
G2000	10x16	Blue	Black	Injection molded	Tank & cover only	1
G2001BT	18x33	Black	Black	IM, textured	Tank & cover only	1
G2551	18x33	Blue	Blue	Blow molded	Tank & cover only	1
G2551B	18x33	Black	Black	Blow molded	Tank & cover only	1
G2552	18x40	Blue	Blue	Blow molded	Tank & cover only	1
G2003	24x41	Black	Black	Blow molded	Tank & cover only	1
G2004	24x50	Black	Black	Blow molded	Tank & cover only	1
G2007	30x48	Black	Black	Rotationally molded	Tank & cover only	1
G2009	30x50	Black	Black	Blow molded	Tank & cover only	1
G2008	39x48	Black	Black	Rotationally molded	Tank & cover only	1
G3015	39x60	Black	Black	Rotationally molded	Tank & cover only	1
G3020	42x60	Black	Black	Rotationally molded	Tank & cover only	1
G3025	50x60	Black	Black	Rotationally molded	Tank & cover only	1

Fully assembled round brine tanks

Part Number	Size	Tank Color	Cover Color	Cover Type	Included components (In addition to tank, cover & tubing.)	Case Qty.
G1016	10x16	Almond	Black	Injection molded	Overflow FTG, grid, pad, 464 float valve, well (For KMNo4)	1
G1015	10x16	Blue	Black	Injection molded	Overflow FTG, grid, pad, 464 float valve, well (For KMNo4)	1
G2023	10x16	Blue	Black	Injection molded	Overflow FTG, grid, 2300 safety valve w/float, air check, well	1
G2026A	18x33	Almond	Almond	Blow molded	Overflow FTG, 2300, grid, safety valve w/float, air check, well	1
G2551AS	18x33	Almond	Almond	Blow molded	Overflow FTG, grid, 2310 safety valve w/float, air check, well	1
G2551BS	18x33	Black	Black	Blow molded	Overflow FTG, grid, 2310 safety valve w/float, air check, well	1
G2028A	18x40	Almond	Almond	Blow molded	Overflow FTG, grid, 2300 safety valve w/float, air check, well	1
G2552AS	18x40	Almond	Almond	Blow molded	Overflow FTG, grid, 2310 safety valve w/float, air check, well	1
G2552BS	18x40	Black	Black	Blow molded	Overflow FTG, grid, 2310 safety valve w/float, air check, well	1
G2028	18x40	Blue	Blue	Blow molded	Overflow FTG, 2300, grid, safety valve w/float, air check, well	1
G2029	18x40	Blue	Blue	Blow molded	Overflow FTG, grid, 2300 safety valve w/float, MPU, well	1
G2028B	18x40	Blue	Blue	Blow molded	Overflow FTG, grid, 2310 safety valve w/float, air check, well	1
G2003A	24x41	Black	Black	Blow molded	Overflow FTG, grid, 2300 safety valve w/float, air check, well	1
G2003B	24x41	Black	Black	Blow molded	Overflow FTG, grid, 454 float valve, well, brine line FTG	1
G2004A	24x50	Black	Black	Blow molded	Overflow FTG, grid, 454 float valve, well, brine line FTG	1
G2007A	30x50	Black	Black	Blow molded	Overflow FTG, grid, 2300 safety valve w/float, air check, well	1

Square brine tanks

Part Number	Size	Tank Color	Cover Color	Cover Type	Description	Case Qty.
G2010	11x11	Black	Black	Injection molded	Tank and cover only	1
G2018A	14x34	Almond	Almond	Blow molded	Tank and cover only	5
G2018B	14x34	Black	Black	Blow molded	Tank and cover only	5
G2018	14x34	Blue	Blue	Blow molded	Tank and cover only	5
G2017B	13.5x44	Almond	Black	Injection molded	Tank (cabinet) and cover only	1

Fully assembled square brine tanks

Part Number	Size	Tank & Cover	Cover	Included components (In addition to tank, cover & tubing.)	Case Qty.
G2018A-2	14x34	Almond	Blow molded	Overflow FTG, 2310 safety valve w/float, air check	6
G2025	14x34	Blue	Blow molded	Overflow FTG, 2300 safety valve w/float, air check	6

Brine tank components

Part Number	Description	Pack
H1016	BRINE WELL CAP 4.0"	50
H1018	BRINE OVERFLOW SET (2 PC)	50
H1024	BRINE WELL CAP 6.0"	10
H1030-14S	BRINE WELL 4.0"X14" SLOTTED 25/CASE	25
H1030-28S	BRINE WELL 4.0"X28" SLOTTED 25/CASE	25
H1030-36S	BRINE WELL 4.0"X36" SLOTTED 25/CASE	25
H1041-29	BRINE WELL 3.5"X29" ROUND SLOTTED W/T&B CAPS GLI	1
H1071	BRINE WELL 6.0"X60" AWR	4
H1071-54	BRINE WELL 6.0"X54" AWR	4
H1072	BRINE GRID SET 18" TP500 W/4" HOLE	25
H1075	BRINE GRID SET 24", MINIMUM SALTING (5"LEGS)	4
H1075AS	BRINE GRID SET 24" NO LEGS	5
H3006-26	BRINE PICKUP TUBE MPU-14X26"X .25"M	1
H6001	BRINE VALVE .75"MPT TYPE A SET BRINE CHECK	5
H6010	BRINE TUBE PVC RIDGID 3/8" OD (PER FT)	50
H6061	BRINE MPU-14 STRAINER ONLY .014" OPENING	20
H6061-28	BRINE PICKUP TUBE MPU-14X28"X .375" OD TUBE	20
H7005	BRINE ASSY SBV 2300/500AC & FLOAT AWR	6
H7005-SBV	BRINE ASSY 3.5" WELL W/SBV 2300/500AC	4
H7007	BRINE ASSY SBV 2310/500AC & FLOAT AWR	4
H7007-SBV	BRINE ASSY 3.5" WELL W/SBV 2310/500AC	4
H7027-03	BRINE VALVE 464 KMNO4 4OZ 3/8" F/G1015 & G1016	1
H7050	BRINE ASSY SBV 2350 W/COMM AIR CHECK 3/4", FLOAT AWR	4
H7050B	BRINE ASSY SBV 2350/900AC W/FLOAT & FIT	4
H7070	BRINE VALVE 454 KIT 3/4" W/36" FLOAT ROD	1
H7070-HF	BRINE VALVE 454 KIT HI-FLOW W/54" FLOAT ROD	4
H7070A	BRINE VALVE 454 3/4" W/48"PVC RISER ASSEMBLED AWR	4
H8000	BRINE ASSY 6" WELL W/CAP 2 PC OVERFLOW F/454 VALVE AWR	1
H8000-F	BRINE ASSY 6" WELL W/2350VALVE COMPLETE F/1/2" TUBING AWR	1
HBPU636	BRINE PICKUP TUBE MPU-14X36"X.375" OD TUBE	100
HBPU836	BRINE AIR CHECK BPUACX36"X.375" OD TUBE	100

Note: Not all brine tanks and components are stocked at all locations.

Brine Valves & Assemblies

Potassium Permanganate Feeder (adjustable*)

Part Number	Color	Size	Weight
G1015	Blue	10” x 16”	12
G1016	Almond	10” x 16”	17

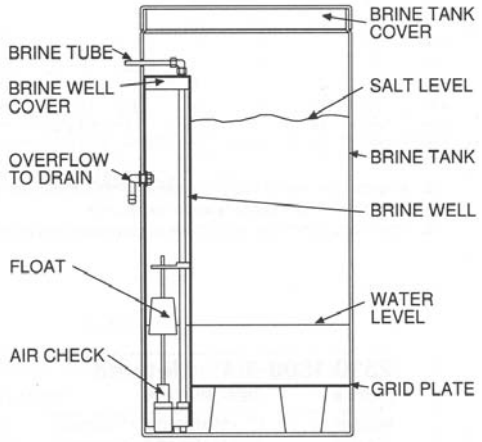
Note: Adjustable KMNO4 feeder assemble are set from factory at 4 oz. Adjustments are made from changing float assembly setting.

Brine Valves - Fleck® Controls

Part Number	Model	Connection	Description
K4560027-FFA	2300	3/8”	Brass safety brine valve only
K4102	2300	3/8”	Brass safety brine valve w/ float assembly
H7005	2300	3/8”	Brass safety brine valve, 500 air check & float
H7005-SBV	2300	3/8”	Brass safety brine valve, 500 air check & float w/ 3.5” well, lid and overflow
K4560014	2310	3/8”	Noryl® safety brine valve
H7007	2310	3/8”	Noryl® safety brine valve w/ float assembly
H7007-SBV	2310	3/8”	Noryl® safety brine valve, 500 air check & float w/ 3.5” well, lid and overflow
K4560038	2350	1”	Brass safety brine valve only
H7050B	2350	1”	Brass safety brine valve, 900 air check & float
H8000-F	2350	1”	Brass safety brine valve, 900 air check & float w/ 6” well, lid and overflow

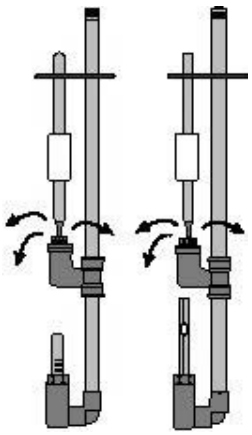
Brine Control Valves

Part Number	Model	Connection	Description
H6000-38	A	3/8” MPT	Preset ToughStuff® brine check assembly
H6000-A	A	1/2" MPT	Preset ToughStuff® brine check assembly
H6001	A	3/4" MPT	Preset ToughStuff® brine check assembly
H7073	A	1” MPT	Preset ToughStuff® brine check assembly
H7075	A	1-1/4” MPT	Preset ToughStuff® brine check assembly
H6001-B	B	3/4" MPT	Adjustable ToughStuff® brine check assembly
H6000-C	C	1/2” MPT	Overhead refill ToughStuff® brine check assembly
H6001-C	C	3/4" MPT	Overhead refill ToughStuff® brine check assembly



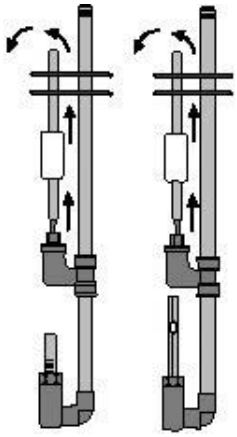
TYPICAL INSTALLATION
TANK BRINE ASSEMBLY

Conventional Type



Type A Type B

Overhead Type



Type C Type D

Mineral Tanks

Full line of mineral tanks, in stock for immediate shipment

We carry a full line of Structure® and Park® tanks for a wide range of applications.

Specifications

Construction	Fiberglass wound
Lining	ABS or polyethylene
Pressure rating	150 psi
Temperature	120°F, maximum
Opening	2-1/2" #8
O-ring	EPDM or EPR*

*Use silicone lubricants. Do not use Buna-N o-rings.

Structural® tanks

Part Number	Size	Top Opening	Color	Base	Capacity	Unit Ctn. Lbs.	Bulk Pack Ctn. Lbs.
C1050	6x18	2.5"	Blue	Black	0.24	9/40	66/276
C1051	6x18	2.5"	Almond	Black	0.24	9/40	66/276
C1066	8x44	2.5"	Almond	Black	1.16	4/49	18/199
C1066-B	8x44	2.5"	Blue	Black	1.16	4/49	18/199
C1084	9x48	2.5"	Almond	Black	1.58	5/58	16/207
C1084-B	9x48	2.5"	Black	Black	1.58	5/58	16/207
C1084-1	9x48	2.5"	Blue	Black	1.58	5/58	16/207
C1092	10x54	2.5"	Almond	Black	2.19	4/76	16/273
C1092-B	10x54	2.5"	Blue	Black	2.19	4/76	16/273
C1094X	12x52	2.5"	Almond	Black	2.97	1/23	9/207
C1094X-1	12x52	2.5"	Blue	Black	2.97	1/23	9/207
C1095A	13x54	2.5"	Almond	Black	3.68	1/28	9/256
C1095B	13x54	4"	Almond	Black	3.68	1/28	9/256
C1095-2.5	13x54	2.5"	Blue	Black	3.68	1/28	9/256
C1098	14x65	4"	Almond	Black	5.43	1/48	9/336
C1099	16x65	4"	Almond	Black	6.55	1/45	9/374
C1019-1	16x65	4"	Blue	Black	6.4	1/51	9/424
C1029	18x65	4"	Almond	Black	8.93	1/65	---
C1030	21x62	4"	Almond	Black	11.38	1/90	---
C1031	24x72	4"	Natural	Black	15.9	1/139	---
C1036A	24x72	6"	Natural	Tripod Base	16	1/149	---
C1036	24x72	6"	Natural	SMC Base	16	1/149	---
C1037	30x72	6"	Natural	EXT Base	24	1/235	---
C1037A	30x72	6"	Natural	Tripod Base	24	1/240	---
C1038	36x72	6"	Natural	EXT Base	33.5	1/282	---
C1038A	36x72	6"	Natural	Tripod Base	33.5	1/282	---
C1040	48x72	6"	Natural	Tripod Base	61.7	1/780	---

Park® tanks

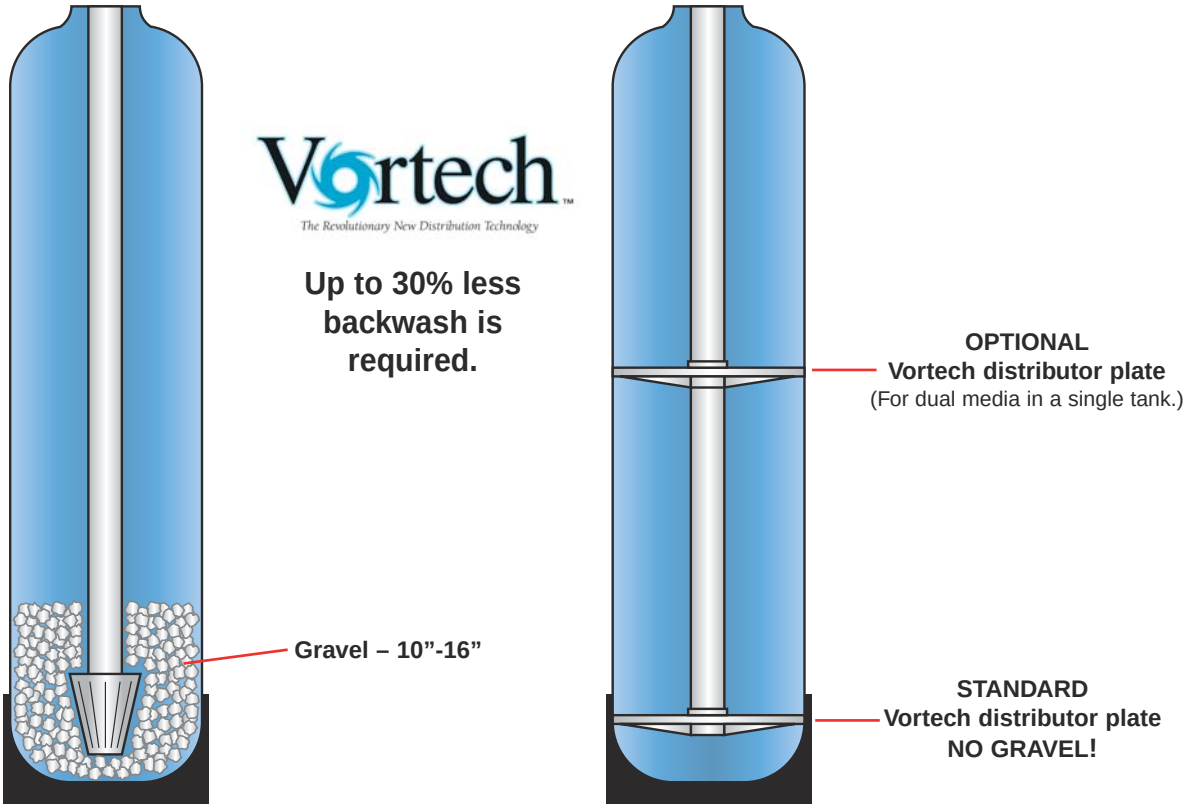
Part Number	Size	Top Opening	Color	Base	Capacity	Weight (Lbs.)
C2002	6x18	2.5"	Blue	Black	0.27	3.8
C2006-2	8x18	2.5"	Blue	Black	0.47	5.3
C2007	8x18	2.5"	Natural	Black	0.47	5.3
C2010-1	8x44	2.5"	Natural	Black	1.25	10.5
C2010	8x44	2.5"	Blue	Black	1.25	10.5
C2013	9x49	2.5"	Blue	Black	1.55	11.5
C2013-1	9x48	2.5"	Natural	Black	1.55	11.5
C2018	10x54	2.5"	Blue	Black	2.20	15.5
C2018-A	10x54	2.5"	Almond	Black	2.20	15.5
C2020-A	12x52	2.5"	Almond	Black	3.32	21.1
C2020	12x52	2.5"	Blue	Black (rubber)	3.32	21.1

Note: See price list for additional Structual and Park tanks.

Vortech™ Systems by Watts®

Revolutionary new distribution technology

Old way… **Smart tank way!**



Features & benefits

- Up to 30% less backwash flow rate is required.
- High flow design maximizes today’s high efficiency valve technology.
- Permanent attachment of dip tube to distributor, so when servicing a valve, distributor stays in place, no more re-bedding.
- Vortech distributor plate is designed for over 6,500 lbs load capacity.
- Elimination of gravel, save on net cost and unit weight, for shipping.
- Universal plate for use in filtration and softening applications.
- Self-cleaning nozzle design.
- Available for 9”, 10”, 12” and 13” tanks; 1” and 1-1/4” valves.
- Increase in softening capacity, due to improved flow through media.
- No channeling of media, providing a cleaner more efficient system.
- Optional secondary distributor plate for dual media systems without additional tanks, valves or efficiency reducing media migration.
- Environmentally friendly, reduction in required backwash times due to improved bed lift at lower flow rates.
- Most efficient softening regeneration, reducing salt consumption.

Vortech™ is the latest, most innovative, and most efficient bottom distribution system.

The Vortech’s high flow design maximizes today’s high efficiency valve technology.

Enpress® Composite Pressure Vessels

ENPRESS utilizes an industry exclusive co-polymer polypropylene formulation for its liner assembly, providing superior performance in both hot and cold temperature environments, and superior chemical and impact resistance…far superior than traditional polyethylene. Allowing the tanks to survive harsh climate extremes, and providing you with the highest quality products.

Features & Benefits

- Dome hole option for 10”, 12”, and 13” diameter
- Co-polymer Polypropylene construction
- Computer controlled cut lengths
- Special high temperature and high-pressure injection process eliminates leaks
- Superior performance in both hot and cold temperature environments
- Threaded inlet is mechanically and chemically welded to dome to prevent leaks
- 4” stainless steel threads (16X65, 21X62, 24X72)
- **100% Made in the USA**

Part Number	Size	Color	Top Opening	Height Inch / mm	Capacity Gal. / Liters	Capacity Cu. Ft.	w/ Base
C9066	8x44	Almond	2.5”	44.2 / 1123	8.5 / 32.2	1.14	Yes
C9066-B	8x44	Black	2.5”	44.2 / 1123	8.5 / 32.2	1.14	Yes
C9066B	8x44	Blue	2.5”	44.2 / 1123	8.5 / 32.2	1.14	Yes
C9084	9x48	Almond	2.5”	48.3 / 1227	11.9 / 45.0`	1.59	Yes
C9084-B	9x48	Black	2.5”	48.3 / 1227	11.9 / 45.0	1.59	Yes
C9084-1	9x48	Blue	2.5”	48.3 / 1227	11.9 / 45.0	1.59	Yes
C9085-NB-TB	10x18	Black	2.5”	17.9 / 455	4.8 / 18.2	0.64	No
C9014-B	10x22	Black	2.5”	21.4 / 544	5.9 / 22.3	0.79	No
C9086-NB-DH-TB	10x24	Black	2.5”	23.1 / 587	6.6 / 25.0	0.88	No
C9088-B-DH	10x35	Black	2.5”	35.0 / 889	10.3 / 39.0	1.38	Yes
C9088-B	10x35	Black	2.5”	35.0 / 889	10.3 / 39.0	1.38	Yes
C9092-DH	10x54	Almond	2.5”	54.4 / 1382	6.5 / 62.5	2.21	Yes
C9092	10x54	Almond	2.5”	54.4 / 1382	6.5 / 62.5	2.21	Yes
C9092-B	10x54	Black	2.5”	54.4 / 1382	6.5 / 62.5	2.21	Yes
C9092B	10x54	Blue	2.5”	54.4 / 1382	6.5 / 62.5	2.21	Yes
C9094-DH	12x52	Almond	2.5”	52.8 / 1341	22.9 / 86.6	3.06	Yes
C9094X	12x52	Almond	2.5”	52.8 / 1341	22.9 / 86.6	3.06	Yes
C9095-DH	13x54	Almond	2.5”	54.3 / 1379	28.0 / 106.0	3.74	Yes
C9095T	13x65	Almond	2.5”	65.1 / 1654	34.3 / 129.8	4.59	Yes
C9095T-1	13x65	Blue	2.5”	65.1 / 1654	34.3 / 129.8	4.59	Yes
C9095B	13x65	Blue	2.5”	65.1 / 1654	34.3 / 129.8	4.59	Yes
C9099	16x65	Almond	4” Stainless Steel	65.6 / 1667	49.0 / 185.5	6.55	Yes
C9030	21x62	Natural	4” Stainless Steel	67.0 / 1702	84.0 / 318.0	11.23	Yes
C9031	24x72	Natural	4” Stainless Steel	73.1 / 1857	115.0 / 435.3	15.37	Yes

Note: DH designates a Dome hole model, this 1-1/4” opening is designed to make adding resin or media easier. All residential and light commercial vessels are backed by an exclusive manufacturers 10-year limited warranty.

Steel Mineral Tanks

Lined and primed.

Steel mineral tanks

Part Number	Description	Std. Pack
B5151	TANK STEEL 20"X 60" EP 2"TS 2"BC 2-4"X6"	1
B5157	TANK STEEL 24"X 60" EP 2"TS 2"BC 2-4"X6"	1
B5157-3	TANK STEEL 24"X 60" EP 3"TS 3"BC 2-4"X6"	1
B5160	TANK STEEL 24"X 72" EP 2"TS 2"BC 2-4"X6"	1
B5163	TANK STEEL 30"X 60" EP 2"TS 2"BC 2-4"X6"	1
B5163-3	TANK STEEL 30"X 60" EP 3"TS 3"BC 2-4"X6"	1
B5166	TANK STEEL 30"X 72" EP 2"TS 2"BC 2-4"X6"	1
B5169	TANK STEEL 36"X 60" EP 3"TS 3"BC 11"X15"/4"X6"	1
B5172	TANK STEEL 36"X 72" EP 3"TS 3"BC 11"X15"/4"X6"	1
B5175	TANK STEEL 42"X 60" EP 3"TS 3"BC 11"X15"/4"X6"	1
B5181	TANK STEEL 48"X 60" EP 4"TS 4"BC 12"X16"/4"X6"	1
B5184	TANK STEEL 48"X 72" EP 4" 12"X16"/4"X6"	1
B5187	TANK STEEL 54"X 60" EP 4" 12"X16"/4"X6"	1
B5197	TANK STEEL 72"X 60" EP 4" 12"X16"/4"X6"	1

Stenner® Chemical Feed Pumps

Self-priming, peristaltic type feed pumps for chlorine and pH adjustment chemicals.

Peristaltic type feed pumps

Stenner® peristaltic feed pumps will not loose prime because they are self priming. Pumps may operate at pressures up to 100 psi, and may be mounted vertically or horizontally. Tube lubrication is not required.

Models

Part Number	Type	Model	GPD	PSI	Voltage	Injection Check	Tubing (Suction & discharge)	Shipping Weight
T55-45MHP2	Single	45	3	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-45MHP10	Single	45	10	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-45MHP10-220	Single	45	10	100	220v/60hz	T55-UCDBINJ	1/4"	8
T55-85MHP17	Single	85	17	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-85MHP40	Single	85	40	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-100DMHP20	Double	100	20	100	120v/60hz	T55-UCDBINJ	1/4"	9
T55-170DMHP34	Double	170	34	100	120v/60hz	T55-UCDBINJ	1/4"	9

Parts

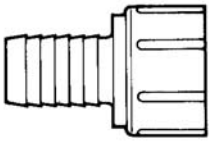
Part Number	Description	Number Per Package
T55-UCCP201	Replacement tube #1	2
T55-UCCP202	Replacement tube #2	2
T55-UCDBINJ	Injection check valve for 1/4" tubing	1
T55-UC3ASYD	Roller assembly	1

DI Tanks, Heads, & Accessories

Portable DI Exchange Tanks*

Part Number	Size	Top Opening	Color	Description	Capacity Cu. Ft	Weigth (lbs)
C2014	9 x 42	2.5” #8	Blue	XPI-25-3DS w/screen & band	1.41	11.1
C2014-N	9 x 42	2.5” #8	Natural	XPI-25-3DS w/screen & band	1.41	11.1
C2014A	12 x 42	2.5” #8	Blue	XPI-25-3DS w/screen & band	2.61	16.9
C2014A-N	12 x 42	2.5” #8	Natural	XPI-25-3DS w/screen & band	2.61	16.9
C2014Z-1N	12 x 42	4.5” #8	Natural	XTA-45-3-1, DS4, IDF & band	2.61	16.9
C2014Z-2	12 x 42	4.5” #8	Blue	XTA-45-3-1, DS4, IS-F & band	2.61	16.9
C2014B	12 x 42	4.5” #8	Natural	XTA-45-3-1, DS4, IS-F & band	2.61	16.9
C2022-2	14 x 47	4.5” #8	Natural	XTA-45-3-1, DS4, ID-F	3.60	26.0
C2022-3	14 x 47	4.5” #8	Natural	XTA-45-3-1, DS4, IS-F	3.60	26.0

*Complete exchange tank package with head/manifold (as listed) and boot. 150 psi max 120°F max



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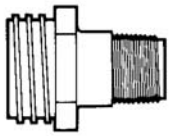

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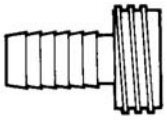

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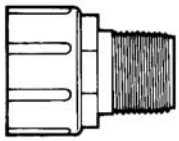


UMA

Park Quick Disconnect Unions

Part Number	Model Number	Size	Description
Q2005	UHB-75	3/4"	Female union x hose barb
Q2007	HB-75	3/4"	Male union x hose barb
Q2009	MA-75	3/4"	Male union x male NPT
Q2011	UMA-75	3/4"	Female union x male NPT
Q2015	HB-100	1”	Male union x hose barb
Q2016	UHB-100	1”	Female union x hose barb
Q2017	MA-100	1”	Male union x male NPT
Q2019	UMA-100	1”	Female union x male NPT
Q2010	-	1”	3/4” & 1” Protective cap
Q2012	-	1”	3/4” & 1” Protective plug
Q2014	-	1”	3/4” & 1” O-ring 215 for Park QD’s

Max operating conditions: 160°F max@ 150 psi

FDA hose for Hi-purity

Part Number	Size	Description	Length
Q56050	1/2"	PVC grey braided	300’
Q56075	3/4"	PVC grey braided	100’
Q56100	1”	PVC grey braided	100’
Q56150	1-1/2”	PVC grey braided	100’

Drop-in Screens

Part Number	Description
C2338	7” slotted PVC for 1” Flo-Coupling & Park Quick Disconnect
C2339	7” on brass Quick Disconnect XWPE & XPI
D4005	PVC for 3/4” Flo-Coupling or 3/4" Park Quick Disconnect
D4006	Stainless Steel for 3/4" Flo-Coupling

DI Tank Heads

Tank Heads, Park International Div. of Sta-Rite Industries

Part Number	Product Numer	Description
XWPE Tank Manifold Assemblies, ABS 2-1/2"#8 thread w/ o-ring, 3/4" Inlet/Outlet, 1/2" riser tube, 3/4" fill-cap		
C2301	XWPE-50	Black tank manifold
C2302	XWPE-50-IS	Black tank manifold with inlet screen
C2303	XWPE-50-DS	Black tank manifold with riser tube & distributor screen
C2304	XWPE-50-IS-DS	Black tank manifold with inlet screen, riser tube & dist. screen
C2311-W	XWPE-50-IS	White tank manifold with inlet screen
C2313-W	XWPE-50-IS-DS	White tank manifold with inlet screen, riser tube & dist. screen
XPI-25-2 Manifold Assemblies, ABS 2-1/2"#8 thread w/ o-ring, 3/4" Inlet/Outlet, 1/2" riser tube, No fill hole		
C2320	XPI-25-2	Black tank manifold
C2321	XPI-25-2-IS	Black tank manifold with inlet screen
C2322	XPI-25-2-DS	Black tank manifold with riser tube & distributor screen
C2323	XPI-25-2-IS-DS	Black tank manifold with inlet screen, riser tube & dist. screen
XPI-25-3 Manifold Assemblies, ABS 2-1/2"#8 thread w/ o-ring, 3/4" Inlet/Outlet, 1/2" riser tube, 3/4" fill-cap		
C2330	XPI-25-3	Black tank manifold
C2331	XPI-25-3-IS	Black tank manifold with inlet screen
C2332	XPI-25-3-DS	Black tank manifold with riser tube & distributor screen
C2333	XPI-25-3-IS-DS	Black tank manifold with inlet screen, riser tube & dist. screen
XTA-45-2 Manifold Assemblies, Glass filled Noryl® 4-1/2" #8 buttress thread w/ o-ring, 1"FPT Inlet/Outlet, 1" riser tube, No fill hole		
C2340	XTA-45-2	Black tank manifold
C2342	XTA-45-2-ID	Black tank manifold with inlet diffuser
C2346	XTA-45-2-ID-DS4	Black tank manifold with inlet diffuser, riser tube & dist. screen
C2348	XTA-45-2-ID-DDS4	Tank manifold with inlet diffuser, riser tube & dbl. dist. screen
XTA-45-3 Manifold Assemblies, Glass filled Noryl® 4-1/2" #8 buttress thread w/ o-ring, 1"FPT Inlet/Outlet, 1" riser tube, 1-3/4" fill cap		
C2350	XTA-45-3	Black tank manifold
C2351	XTA-45-3-IS	Black tank manifold with inlet screen
C2352	XTA-45-3-ID	Black tank manifold with inlet diffuser
C2353	XTA-45-3-DS4	Black tank manifold with riser tube & distributor screen
C2354	XTA-45-3-DDS4	Black tank manifold with riser tube & dbl. distributor screen
C2355	XTA-45-3-IS-DS4	Black tank manifold with inlet screen, riser tube & dist. screen
C2356	XTA-45-3-ID-DS4	Black tank manifold with inlet diffuser, riser tube & dist. screen
C2357	XTA-45-3-IS-DDS4	Tank manifold with inlet screen, riser tube & dbl. dist. screen
XTA-45-3-1 Manifold Assemblies, Glass filled Noryl® 4-1/2" #8 buttress thread w/ o-ring, three (3) 1"FPT Inlet/Outlet, 1" riser tube, No fill hole		
C2360	XTA-45-3-1	Black tank manifold
C2361	XTA-45-3-1-IS	Black tank manifold with inlet screen
C2362	XTA-45-3-1-ID	Black tank manifold with inlet diffuser
C2363	XTA-45-3-1-DS4	Black tank manifold with riser tube & distributor screen
C2365	XTA-45-3-1-IS-DS4	Black tank manifold with inlet screen, riser tube & dist. screen
C2366	XTA-45-3-1-ID-DS4	Black tank manifold with inlet diffuser, riser tube & dist. screen
C2367	XTA-45-3-1-IS-DDS4	Tank manifold with inlet screen, riser tube & dbl. dist. screen
C2368	XTA-45-3-1-ID-DDS4	Tank manifold with inlet diffuser, riser tube & dbl. dist. screen

Diaphragm Control Valves

Aquamatic Diaphragm Control Valves*

Part Number	Model Number	Description	Body	Size	Weight (lbs)
K1031	421	Normally Open	Metal	3/4" FNPT	4
K1032	421	Normally Open	Metal	1" FNPT	4
K1034	424	Normally Open	Metal	1/2" FNPT	7
K1035	425	Normally Open	Metal	2" FNPT	16
K1037	426	Normally Open	Metal	2-1/2" FNPT	20
K1038	427	Normally Open	Metal	3" FNPT	31
K1040	428F	Normally Open	Metal	4" FLANGE	75
K1131	421	Normally Closed	Metal	3/4" FNPT	4
K1132	421	Normally Closed	Metal	1" FNPT	4
K1134	424	Normally Closed	Metal	1-1/2" FNPT	7
K1135	425	Normally Closed	Metal	2" FNPT	16
K1045	520	Normally Open w/ connector	Plastic	1/2" MNPT	2
K1047	521	Normally Open w/ connector	Plastic	1" MNPT	2
K1048	524	Normally Open w/ connector	Plastic	1-1/2" MNPT	3
K1050	524WA	Normally Open	Plastic	2" MNPT	5
K1051	524F	Normally Open	Plastic	2" FLANGE	4
K1053	526W	Normally Open	Plastic	2-1/2" FLANGE	10
K1054	526F	Normally Open	Plastic	3" FLANGE	12
K1147	521	Normally closed w/ connector	Plastic	1" MNPT	2
K1148	524	Normally closed w/ connector	Plastic	1-1/2" MNPT	3
K1151	524	Normally closed	Plastic	2" FLANGE	4
K1153	526	Normally closed	Plastic	2.5" F-SKT	10
K1067	V531	Normally Open	Plastic	3/4" & 1"	2
K1069	V535	Normally Open	Plastic	2"	8
K1070	V537	Normally Open	Plastic	3"	12
K1067-NC	V531	Normally closed	Plastic	3/4" & 1"	2
K1070-NC	V537	Normally closed	Plastic	3"	12

*Max operating specification: 125psi @140˚F. If the dome cap is set up with stager fitting the valve is normally open; if the stager fitting is on the main body & dome cap is plugged, valve is normally closed.

Diaphragm & seal Kits

Part Number	Description	Body	Size
K12421-RA	Diaphragm & seal kit metal body	Metal	3/4" & 1"
K12424-RA	Diaphragm & seal kit metal body	Metal	2"
K12426-RA	Diaphragm & seal kit metal body	Metal	2.5"
K12427-RA	Diaphragm & seal kit metal body	Metal	3"
K12428-RA	Diaphragm & seal kit metal body	Metal	4"
K12429-RA	Diaphragm & seal kit metal body	Metal	6"
K12520-RA	Diaphragm & seal kit plastic body	Plastic	1/2"
K12521-RA	Diaphragm & seal kit plastic body	Plastic	3/4" & 1"
K12524-RA	Diaphragm & seal kit plastic body	Plastic	1.5" & 2"
K12526-RA	Diaphragm & seal kit plastic body	Plastic	2.5" & 3"
K12524-UA	2" Male socket adapters		

Aquamatic Valve Controller (Stager)

Part Number	Model Number	Description
K11148	A148-00	120/60 w/ homing & AMS 7D
K11958-TA	E958-TA	N4F 120/60 w/homing

Valves

Fleck 5600

Fleck 7000

Fleck 9000

Autotrol 255 / 440i

Logix

Fleck® 2510 plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4022FM	2510	Filter, manual	3/4"	N/A	120/60	With cover, DLFC is separate.	1
K4022FM-Y075	2510	Filter, manual	3/4"	N/A	120/60	Cover, 3/4" MNPT plastic yoke, DLFC.	4
K4022SM	2510	Softener, man.	3/4"	N/A	120/60	Cover only. DLFC is separate.	1
K4022SM-Y075	2510	Softener, man.	3/4"	N/A	120/60	Cover, 3/4" MNPT plastic yoke, DLFC.	1
K4022FTC12-1206	2510	Filter	3/4"	N/A	120/60	Valve only, TC	4
K4022FTC-B075	2510	Filter	3/4"	3/4" plastic	120/60	With by-pass, cover, DLFC.	1
K4022FTC-B100	2510	Filter	3/4"	1" plastic	120/60	With by-pass, cover, DLFC.	1
K4022FTC-B100SS	2510	Filter	3/4"	1" stainless	120/60	With by-pass, cover, DLFC.	1
K4022STC12-1206	2510	Softener, TC	3/4"	N/A	120/60	Valve only. Options are separate.	4
K4022STC-B075	2510	Softener, TC	3/4"	3/4" plastic	120/60	With cover, by-pass, DLFC.	1
K4022STC-B100	2510/1600	Softener, TC	3/4"	1" plastic	120/60	With cover, by-pass, DLFC.	1
K4022STC-B100SS	2510/1650	Softener, TC	3/4"	1" stainless	120/60	With cover, by-pass, DLFC	1
K4022SMTS-1206	2510	Softener, meter	3/4"	N/A	120/60	Valve only (3/4" std. range).	1
K4022SMT-B075	2510	Softener, meter	3/4"	3/4" plastic	120/60	With by-pass, cover, 3/4" std., DLFC	1
K4022SMT-B100	2510	Softener, meter	3/4"	1" plastic	120/60	Includes by pass and cover.	4

Fleck® 2750 brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4010F	2750	Filter, manual	1"	N/A	120/60	Valve only; order DLFC separately.	9
K4010CF	2750	Filter	1"	N/A	120/60	Valve only; cover, DLFC separate.	4
K4010CF-AMS-ENV	2750	Filter	1"	N/A	120/60	Valve only with aux micro switch*	4
K4010C	2750/1600	Softener, TC	1"	N/A	120/60	Valve only.	4
K4010CM	2750/1600	Softener, meter	1"	N/A	120/60	Valve only (3/4" meter).	1
K4010CME	2750/1600	Softener, meter	1"	N/A	120/60	Valve only (3/4" range meter)* EXT	4
K4010DE	2750/1600	Softener, meter	1"	N/A	120/60	Valve only (1" ext range meter)*	4
K4010D	2750/1600	Softener, meter	1"	N/A	120/60	Valve only (1" meter)*	4
K4010-NT	2750/1600	Softener, NT	1"	N/A	120/60	NT valve & transformer. (3/4" M)*	1
K4010CM-SE	2750/1600	Softener, SE	1"	N/A	120/60	SE valve & transformer (3/4" M)*	4
K4010ESE	2750/1600	Softener, SE	1"	N/A	120/60	SE valve & transformer*	1

Fleck® 2850 brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4050EFC7AN	2850	Filter	1-1/2"	N/A	120/60	Valve, micro switch, NHW by-piston*	1
K4050FC	2850	Filter	1-1/2"	N/A	120/60	Valve only*	4
K4050EF-NT	2850	Filter, NT	1-1/2"	N/A	120/60	NT valve w/ no hard water by piston*	1
K4050FNT	2850	Filter	1-1/2"	N/A	120/60	NT valve only*	1
K4051SC	2850/1600	Softener	1-1/2"	N/A	120/60	Valve only*	1
K4051SME1	2850/1600	Softener, meter	1-1/2"	N/A	120/60	Valve only (1" std. range)*	4
K4051SMS1	2850/1600	Softener, meter	1-1/2"	N/A	120/60	Valve only (1" std. range)*	4
K4051ES-NTH	2850/1600	Softener, NT	1-1/2"	N/A	120/60	Valve, micro switch, NHW by-piston*	1
K4051ES-NT	2850/1600	Softener, NT	1-1/2"	N/A	120/60	Valve, micro switch, NHW by-piston*	1
K4051ESE	2850/1650	Softener, SE	1-1/2"	N/A	120/60	SE valve only w/o turbine*	1
K4050-SE	2850/1650	Softener, SE	1-1/2"	N/A	120/60	SE valve only with turbine*	1
K4050SC	2850/1700	Softener, TC	1-1/2"	N/A	120/60	Valve only*	4
K4050SME	2850/1710	Softener, meter	1-1/2"	N/A	120/60	Valve only with 1-1/2" ext range*	4
K4050SME1	2850/1710	Softener, meter	1-1/2"	N/A	120/60	Valve only with 1" ext. range*	4
K4050SMS1	2850/1710	Softener, meter	1-1/2"	N/A	120/60	Valve only with 1" std. range*	4
K4050ES-NTH	2850/1710	Softener, NT	1-1/2"	N/A	120/60	Valve, micro switch, NHW by-piston*	1
K4050ES-NT	2850/1710	Softener, NT	1-1/2"	N/A	120/60	Valve, micro switch, NHW by-piston*	1
K4050ESE	2850/1710	Softener, SE	1-1/2"	N/A	120/60	SE valve w/o turbine*	1
K4050-SE1	2850/1710	Softener, SE	1-1/2"	N/A	120/60	SE valve only with turbine*	1

M = Manual; TC = time clock; MTR = metered; A = automatic; SE = simple electronics; NT = networking timer; STD = standard range meter; EXT = extended range meter; HWBP = hard water bypass piston; NHWBP = no hard water bypass piston; AMS = auxiliary micro switch; ENV = environmental; DLFC = drain line flow control housing (order GPM button separately); PL = plastic; SS = Stainless steel; RM = remote meter; SYS = system.

Fleck® 2900 brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4018F	2900	Filter	2"	N/A	120/60	Valve, C	4
K4018F-NT	2900	Filter NT	2"	N/A	120/60	Valve, C, ENV, NHWBP, w/trans	1
K4018B-E	2900/1600	Softener MTR	2"	N/A	120/60	Valve, C, 2" EXT	4
K4018B	2900/1600	Softener MTR	2"	N/A	120/60	Valve, C, 2" STD	1
K4018GE	2900/1600	Softener MTR	2"	N/A	120/60	Valve, C, SYS 7, ENV, 2" RM, EXT	4
K4018G	2900/1600	Softener MTR	2"	N/A	120/60	Valve, C, SYS 7, ENV, 2" RM, STD	4
K4018A	2900/1600	Softener TC	2"	N/A	120/60	Valve, C	1
K4018-NTH	2900/1650	Softener NT	2"	N/A	120/60	Valve, C, ENV, HWBP, w/trans	1
K4018-NT	2900/1650	Softener NT	2"	N/A	120/60	Valve, C, ENV, NHWBP, w/trans	1
K4017	2900/1700	Softener TC	2"	N/A	120/60	Valve, C	4
K4017CE	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, 2" EXT	4
K4017C	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, 2" STD	1
K4017-EN	2900/1710	Softener TC	2"	N/A	120/60	Valve, C, ENV, NHWBP	1
K4017DE	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, SYS 5, ENV, 2" EXT, NHWBP	4
K4017D	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, SYS 5, ENV, 2" STD, NHWBP	1
K4017G	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, SYS 7, ENV	1
K4017E	2900/1710	Softener MTR	2"	N/A	120/60	Valve, C, SYS 7, ENV, 2" RM, STD	1
K4017-NTH	2900/1710	Softener NT	2"	N/A	120/60	Valve, C, ENV, HWBP, w/trans	1
K4017-NT	2900/1710	Softener NT	2"	N/A	120/60	Valve, C, ENV, NHWBP, w/trans	1

Fleck® 3150 brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4024C	3150/1800	Softener	2"	N/A	120/60	Valve, C, SM, ENV	4
K4024CT	3150	Filter	2"	N/A	120/60	Valve, C, TM, ENV	4
K4024CT-NTH	3150	Filter NT	2"	N/A	120/60	Valve, C, TM, ENV, HWBP, w/trans	1
K4024TA	3150/1800	Softener MTR	2"	N/A	120/60	Valve, C, SM, SYS 7, ENV, 2" RM, STD	4
K4024A	3150/1800	Softener MTR	2"	N/A	120/60	Valve, C, SM, ENV, 2" STD	1
K4024	3150/1800	Softener TC	2"	N/A	120/60	Valve, C, SM, ENV	1
K4024-NTH	3150/1800	Softener NT	2"	N/A	120/60	Valve, C, SM,ENV, HWBP, w/trans	1
K4024-NT	3150/1800	Softener NT	2"	N/A	120/60	Valve, C, SM, ENV, NHWBP, w/trans	1
K4024T	3150/1800	Softener TC	2"	N/A	120/60	Valve, C, TM, ENV	1
K4024T-NT	3150/1800	Softener NT	2"	N/A	120/60	Valve, C, TM, ENV, HWBP, w/trans	1
K4024TN-NT	3150/1800	Softener NT	2"	N/A	120/60	Valve, C, TM, ENV, NHWBP, w/trans	1

Fleck® 3900 brass valve

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4040	3900	Filter	3"	N/A	120/60	Valve, C, ENV, SF/FL TM	4
K4040SM	3900	Filter	3"	N/A	120/60	Valve, C, ENV, SM	1
K4042E	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM, 3" EXT	4
K4042	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM, 3" STD	4
K4041	3900/1800	Softener TC	3"	N/A	120/60	Valve, C, ENV, SF/FL TM	4
K4045E-F	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM, SYS 5 EXT	4
K4045-F	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM, SYS 5 STD	4
K4045	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, 6/8 TM, SYS 5 STD	4
K4043E	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM,SYS7 RM EXT	4
K4043	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SF/FL TM, SYS7 RM STD	4
K4041-NTH	3900/1800	Softener NT	3"	N/A	120/60	Valve, C,ENV, SF/FL TM, HWBP, w/trans	1
K4041-NT	3900/1800	Softener NT	3"	N/A	120/60	Valve, C,ENV, SF/FL TM, NHWBP, w/tras	1
K4042SM	3900/1800	Softener MTR	3"	N/A	120/60	Valve, C, ENV, SM, 3" STD	1
K4043-SM	3900/1800	Softener MTR	3"	N/A	120/60	Valve C, ENV, SM, SYS 7 RM STD	1
K4041SM	3900/1800	Softener TC	3"	N/A	120/60	Valve, C, ENV, SM	1
K4041SM-NTH	3900/1800	Softener NT	3"	N/A	120/60	Valve, C, ENV, SM, HWBP, w/trans	1
K4041SM-NT	3900/1800	Softener NT	3"	N/A	120/60	Valve, C, ENV, SM, NHWBP, w/trans	1

M = Manual; TC = time clock; MTR = metered; A = automatic; SE = simple electronics; NT = networking timer; STD = standard range meter; EXT = extended range meter; HWBP = hard water bypass piston; NHWBP = no hard water bypass piston; AMS = auxiliary micro switch; ENV = environmental; DLFC = drain line flow control housing (order GPM button separately); PL = plastic; SS = Stainless steel; RM = remote meter; SYS = system.

Fleck valves, continued

Fleck® 4650 hot water brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4020STCH-1206	4650/1600	Softener TC	3/4"	N/A	120/60	Valve only	1
K4020S-HOT	4650/1600	Softener TC	3/4"	3/4" SS	120/60	Includes cover, bypass	1

TC = time clock SS = stainless steel

Fleck® 5600 plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4014U	5600	Filter	3/4"	N/A	120/60	Valve only	6
K4014F	5600	Filter	3/4"	3/4" SS	120/60	Includes cover, bypass	6
K4016F	5600	Filter	3/4"	1" SS	120/60	Includes cover, bypass	6
K4014K1	5600/1600	Filter	3/4"	N/A	120/60	Valve only for KMNO4	6
K4014PB	5600/1600	Filter	3/4"	3/4" SS	120/60	Includes cover, bypass, KMNO4	6
K4014Y-09	5600/1600	Softener TC	3/4"	N/A	120/60	Valve only for 9" tank	6
K4014Y-10	5600/1600	Softener TC	3/4"	N/A	120/60	Valve only for 10" tank	6
K4014Y-12	5600/1600	Softener TC	3/4"	N/A	120/60	Valve only for 12" tank	6
K4014Y-24	5600/1600	Softener TC	3/4"	N/A	24/60	Valve only	6
K4014FL	5600/1600	Softener TC	3/4"	3/4" SS	120/60	Includes cover, bypass	6
K4016	5600/1600	Softener TC	3/4"	1" SS	120/60	Includes cover, bypass	6
K4014W-09	5600/1600	Softener MTR	3/4"	N/A	120/60	Valve only for 9" tank, STD	6
K4014W-10	5600/1600	Softener MTR	3/4"	N/A	120/60	Valve only for 10" tank, STD	6
K4014W-12	56001600	Softener MTR	3/4"	N/A	120/60	Valve only for 12" tank, STD	6
K4014X-24	5600/1600	Softener MTR	3/4"	N/A	24/60	Valve only	6
K4014W-E	5600/1600	Softener MTR	3/4"	N/A	120/60	Valve only, 3/4" EXT	6
K4015S	5600/1600	Softener MTR	3/4"	3/4" SS	120/60	Includes cover, bypass, 3/4" STD	6
K4016A	5600/1600	Softener TC	3/4"	1" SS	120/60	Includes cover, bypass	6
K4014SE	5600/1600	Softener SE	3/4"	N/A	120/60	Valve only, 3/4" STD, w/trans	6

Fleck® 7000 plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4037FC-0246T	7000	Filter	1.25"	N/A	24/60	Includes transformer	1
K4037SM09-0246T	7000/1610	Softener MTR	1.25"	N/A	24/60	Set for 9" tank, includes trans	1
K4037SM10-0246T	7000/1610	Softener MTR	1.25"	N/A	24/60	Set for 10" tank, includes trans	6
K4037SM12-0246T	7000/1610	Softener MTR	1.25"	N/A	24/60	Set for 12" tank, includes trans	6
K4038SM12-0246T	7000/1610	Softener MTR	1.25"	N/A	24/60	Set for 12" tank, includes trans HF	1

HF = high flow

Fleck® 9000 twin brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4026X	9000/1600	Softener MTR	3/4"	N/A	120/60	Valve only, STD, ICP	1
K4026XE	9000/1600	Softener MTR	3/4"	N/A	120/60	Valve only, EXT, ICP	1
K4026XSE	9000/1600	Softener SE	3/4"	N/A	120/60	Valve only, ICP, w/trans	1
K4026	9000/1600	Softener MTR	3/4"	3/4" SS	120/60	Valve, C, BY, STD, ICP	4
K4026-A	9000/1600	Softener MTR	3/4"	1" SS	120/60	Valve, C, BY, EXT, ICP	1
K4027XX	9000/1600	Softener MTR	1"	N/A	120/60	Valve only, STD	1
K4027	9000/1600	Softener MTR	1"	N/A	120/60	Valve, C, STD	1
K4027-B	9000/1600	Softener MTR	1"	N/A	120/60	Valve, C, EXT	1

Fleck® 9100 twin plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4032X	9100/1600	Softener MTR	3/4"	N/A	120/60	Valve only, 3/4" STD	4
K4032XE	9100/1600	Softener MTR	3/4"	N/A	120/60	Valve only, 3/4" EXT	1
K4033X	9100/1600	Softener MTR	1"	N/A	120/60	Valve only, 1" STD	4

M = Manual; TC = time clock; MTR = metered; A = automatic; SE = simple electronics; NT = networking timer; STD = standard range meter; EXT = extended range meter; HWBP = hard water bypass piston; NHWBP = no hard water bypass piston; AMS = auxiliary micro switch; ENV = environmental; DLFC = drain line flow control housing (order GPM button separately); PL = plastic; SS = Stainless steel; RM = remote meter; SYS = system.

Fleck valves, continued

Fleck® 9500 twin brass valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K4028X	9500/1600	Softener MTR	1-1/2"	N/A	120/60	Valve only, 1-1/2" STD, ICP	4
K4028	9500/1600	Softener MTR	1-1/2"	N/A	120/60	Valve, C, 1-1/2" STD, ICP	4
K4028XE	9500/1600	Softener MTR	1-1/2"	N/A	120/60	Valve only, 1-1/2" EXT, ICP	4
K4028E	9500/1600	Softener MTR	1-1/2"	N/A	120/60	Valve C, 1-1/2" EXT, ICP	4
K4028SE	9500/1600	Softener SE	1-1/2"	N/A	120/60	Valve, T, ICP	1
K4028SE1	9500/1710	Softener SE	1-1/2"	N/A	120/60	Valve, T, ICP	1
K4029X	9500/1710	Softener MTR	1-1/2"	N/A	120/60	Valve only, 1-1/2" STD, ICP	4
K4029	9500/1710	Softener MTR	1-1/2"	N/A	120/60	Valve, C, 1-1/2" STD, ICP	1
K4029XE	9500/1710	Softener MTR	1-1/2"	N/A	120/60	Valve only, 1-1/2" EXT, ICP	1
K4029E	9500/1710	Softener MTR	1-1/2"	N/A	120/60	Valve, C, 1-1/2" EXT, ICP	1

MTR = metered SE = simple electronics C = cover included STD = standard range meter EXT = extended range meter
ICP = interconnect pipes included

Fleck® valve parts

Part Number	Description	Case
K4541047	COMMUNICATION CABLE (12 FT PHONE CORD) FOR FLECK NT	1
K4560009	#900 AIR CHECK COMMERCIAL	12
K4510760	1.0GPM 3.0 LBS SALT/MIN	10
K4560029	1600 BRINE VALVE SHORT STEM (NO BLFC)	1
K4560029-100	1600 BRINE VALVE SHORT STEM W/FC 1.00 GPM	1
K4560080	1600 INJECTOR ASSY. #0 (CMPL. 1500 THRU 2900)	4
K4560037	1600/9500 BRINE VALVE	1
K4560034	1700 BRINE VALVE 2.0 GPM	1
K4560381	1700 INJECTOR ASSY. 1/2" SPEC. INJECTOR SIZE:____	1
K4560039	1700/9500 BRINE VALVE 2.0 BLFC	1
K4560036-02	1800 BRINE VALVE ASSY. -STYLE #3-	1
K4515128-05	1800 INJECTOR NOZZLE #5 RED 30"	20
K4515128-06	1800 INJECTOR NOZZLE #6 WHITE 36"	6
K4515127-05	1800 INJECTOR THROAT #5 RED 30"	20
K4515127-06	1800 INJECTOR THROAT #6 WHITE 36"	4
K4560028	2300 FLOAT ASSY. BLUE/WHT	24
K4560027-FFA	2300 SAFETY BRINE VALVE BODY	24
K4102	2300 SBV W/FLOAT (BLUE/WHITE)	6
K4560014	2310 SAFETY BRINE VALVE	24
K4560038	2350 SAFETY BRINE VALVE (COMMERCIAL-NO FLOAT)	6
K4560050-21	25/2750/29DRIVE ASSY. STF 120V	1
K4560105	2850 PISTON ASSY.	1
K4560104	2900 PISTON ASSY. NO HARDWATER BYPASS	1
K4560103	2900 PISTON ASSY. STD. HARDWATER BYPASS	1
K4560616	3100 METER ASSY. 2" ELECTRONIC	1
K4025E	3100 REMOTE METER-EXT IMMED 2.0" 120/60	4
K4025	3100 REMOTE METER-STD IMMED 2.0" 120/60	4
K4560106-00	3150 PISTON ASSY. STD.	1
K4560106-10	3150 PISTON ASSY. UPFLOW (HI BACKWASH 3900 UPPER)	1
K4560303-13	3200 7 DAY TIMER STF 120V 60HZ	1
K4560304-13	3200 12 DAY TIMER STF 120V 60HZ	1
K4560107-10	3900 PISTON ASSY. LOWER NO HARDWATER BYPASS	1
K4560032	4650/5600 BRINE VALVE (PLUNGER ASSY. ONLY)	6
K4560084	5600 INJECTOR ASSY. (PL 46/5600)	1
K4560102-10	5600 PISTON ASSY. FEEDER/FILTER (BLACK)	2
K4560102	5600 PISTON ASSY. STD. (WHITE F/SOFTENER)	2
K4560086	5600/9000 METER ASSY. .75" STD. RANGE	1
K4560350	9000 BRINE VALVE ASSY.	6
K4560385	9000 INJ/DRAIN MODULE ASSY.	1
K4560401	9000 PISTON ASSY. LOWER	1
K4560400	9000 PISTON ASSY. TOP	1
K4560109	9500 PISTON ASSY. LOWER	1
K4560108	9500 PISTON ASSY. UPPER	1
K4515078-01	ADAPTER 1" COUPLING W/O-RING	10
K4519620	ADAPTER COUPLING ASSY. 3/4" 90 W/O-RINGS, CLIPS,& SC	6
K4110-75	ADAPTER DLFC .75" F/2510 PVC	10
K4515131	BACKPLATE F/9000/9500	1
K4560020-25	BLFC ASSY. .25 GPM F/1600/3600	4
K4560710-2.0	BLFC ASSY. 2.0 GPM 1.00" FXM NPT	6
K4560710-5.0	BLFC ASSY. 5.0 GPM 1.00" FXM NPT	6

Fleck valve parts, continued

Part Number	Description	Case
K4514775	CAM DRIVE F/2900/1600	10
K4512777	CAM SHUT-OFF VALVE BLACK STF 25/2700	10
K4541242-01	CONNECTOR, 1"/1.25" SWEAT SOLD EACH-NEED 2 PER VALVE	1
K4541241-01	CONNECTOR, 1.0" MPT PLASTIC SOLD EACH-NEED 2 PER VALVE	1
K4541244-01	CONNECTOR, 1.25" MPT PLASTIC SOLD EACH-NEED 2 PER VALVE	1
K4541243-01	CONNECTOR, 1.25"/1.5 SWEAT SOLD EACH-NEED 2 PER VALVE	1
K4560219-02	COVER ENVIRO BLACK/CLEAR F/2750/2900 UPPER	12
K4560232-110	DESIGNER COVER BLACK 1PC F/15-2850, 9000, 9500	24
K4560232-112	DESIGNER COVER BLACK 1PC W/LEFT WINDOW	24
K4560226	DESIGNER COVER BLACK/BLACK 5600	24
K4512460	DISTRIBUTOR POINT TOP/BOTTOM STRAIGHT 13/16"WO/RISER	24
K4560700-8.0	DLFC .75" FXF NPT 8 GPM	2
K4560700-9.0	DLFC .75" FXF NPT 9 GPM	2
K4560700-10.0	DLFC .75" FXF NPT 10 GPM	2
K4560700-12.0	DLFC .75" FXF NPT 12 GPM	2
K4560700-15	DLFC .75" FXF NPT 15 GPM	2
K4560700-25	DLFC .75" FXF NPT 25 GPM	2
K4560365	DLFC .75" NPT BRASS NO BUTTON X1/2" (SPEC GPM 1.2-7.0)	6
K4560365-2.0	DLFC .75"X1/2" FXF BRASS 2.0 GPM	6
K4560365-2.4	DLFC .75"X1/2" FXF BRASS 2.4 GPM	6
K4560365-3.5	DLFC .75"X1/2" FXF BRASS 3.5 GPM	6
K4560365-4.0	DLFC .75"X1/2" FXF BRASS 4.0 GPM	6
K4560365-5.0	DLFC .75"X1/2" FXF BRASS 5.0 GPM	6
K4560365-7.0	DLFC .75"X1/2" FXF BRASS 7.0 GPM	6
K4560366-2.0	DLFC 1.0"X.75" FXF BRASS 2.0 GPM	2
K4560366-3.5	DLFC 1.0"X.75" FXF BRASS 3.5 GPM	2
K4560366-5.0	DLFC 1.0"X.75" FXF BRASS 5.0 GPM	2
K4560366-7.0	DLFC 1.0"X.75" FXF BRASS 7.0 GPM	2
K4560366	DLFC 1.00"FNPT X 3/4"F BRASS (SPEC GPM 1.2-7.0)	6
K4519480	DLFC HSG .75" X .75"FNPT F/8,9,10,12,15,20,25,30	20
K4560705-4.0	DLFC PLASTIC 4.0 GPM F/251/27/36/50/85	6
K4560705-7.0	DLFC PLASTIC 7.0 GPM F/251/27/36/50/85	6
K4560705-00	DLFC PLASTIC BLANK (HSNG LESS BUTTONF) 251/27/36/50/85	24
K4513640	FC DOLE 1.00" FXF 30.0 GPM	1
K4560068	FLOAT ASSY. F/2310 W/30" ROD	24
K4560026	FLOAT ASSY. F/400A/2350 (1-RED/WHT, 1-ROD, 2-GMT)	20
K4512094	FLOW WASHER .25 GPM	20
K4512095	FLOW WASHER .50 GPM	20
K4512097	FLOW WASHER 1.0 GPM	20
K4512085	FLOW WASHER 1.2 GPM	24
K4512086	FLOW WASHER 1.5 GPM	24
K4512087	FLOW WASHER 2.0 GPM	24
K4512088	FLOW WASHER 2.4 GPM	24
K4512089	FLOW WASHER 3.0 GPM	24
K4512090	FLOW WASHER 3.5 GPM	24
K4512091	FLOW WASHER 4.0 GPM	24
K4512092	FLOW WASHER 5.0 GPM	24
K4512408	FLOW WASHER 7.0 GPM	24
K4516529	FLOW WASHER 10 GPM	6
K4516735	FLOW WASHER 12.O GPM	10
K4516736	FLOW WASHER 15.0 GPM	6
K4516737	FLOW WASHER 25.0 GPM	10
K4516046	GEAR DRIVE	4
K4513509	IMPELLER	6
K4512973	INJECTOR NOZZLE #0-#4 PVC KMNO4 9" 12"	10
K4510913-W	INJECTOR NOZZLE #1 WHITE DRILL .045/.047 8.0" 9.0"	10
K4510913-BL	INJECTOR NOZZLE #2 BLUE DRILL .060/.066 12.0"	10
K4510913-Y	INJECTOR NOZZLE #3 YELLOW DRILL .070/.076 14.0" 16.	10
K4514801-3CY	INJECTOR NOZZLE 3C .144 YELLOW F/1700	10
K4514801-5CW	INJECTOR NOZZLE 5C .246 WHITE F/1700	10
K4514801-6R	INJECTOR NOZZLE 6C .312 RED	10
K4512974	INJECTOR THROAT #0-#4 PVC KMNO4	10
K4510914-W	INJECTOR THROAT #1 WHITE 8.0" 9.0" 10.0"	10
K4510914-BL	INJECTOR THROAT #2 BLUE 12.0"	10
K4510914-Y	INJECTOR THROAT #3 YELLOW 14.0" 16.0"	10
K4514802-3Y	INJECTOR THROAT 3C .144 YELLOW	10
K4514802-5W	INJECTOR THROAT 5C .246 WHITE	10
K4514802-6R	INJECTOR THROAT 6C .312 RED	10
K4510302	INSULATOR LIMIT SWITCH F/MICRO SWITCH	100
K4560171-01	KIT MOTOR 120V 50/60HZ 1 RPM SAIA F/90/95 BF 12/93	1
K4560354-13	KIT P/H 5600 METER L-BACK 120/60 WO/CVR, PISTON	1
K4560353-13	KIT P/H 5600 TC L-BACK 120/60 WO/CVR, PISTON	1

Fleck valve parts, continued

Part Number	Description	Case
K4560420	KIT P/H 9500 120/60 WO/CVR, BV, PISTON	1
K4561560-07	METER ASSY, IN-LINE, 1.0" BRASS ADAPT	1
K4514043	METER CABLE ASSY. 8.25" F/5600/5000	6
K4515425	METER CABLE ASSY. 13.25" F/9000 3/4" METER	6
K4515216	METER CABLE ASSY. 15.25" F/2900	4
K4515218	METER CAP ASSY. STD RANGE (BRASS 1", 1.5", 2")	1
K4515237	METER CAP ASSY. EXT RANGE (BRASS 1", 1.5", 2")	1
K4515150	METER CAP ASSY. EXT RANGE PLASTIC	1
K4514038	METER CAP ASSY. STD RANGE F/5600/2500	1
K4510218	MICRO SWITCH 25/2700 DR METER	10
K4519659-1	MOTOR 24V 60HZ 1/30 RPM F/5600/3200 METAL PINION	1
K4518738	MOTOR 120V 50/60HZ 1 RPM SAIA	1
K4519170	MOTOR 120V 60HZ 1/15 RPM F/3200	1
K4518743-1	MOTOR 120V 60HZ 1/30 RPM F/5600/3200 METAL PINION	1
K4540384	MOTOR DRIVE 115V 60HZ, 1500-2900	1
K4540387	MOTOR DRIVE, 115V 60HZ 2900 LOWER	1
K4510339	NUT HEX 4-40 F/MICRO SWITCH MOUNT	10
K4515210	O-RING F/PARK TANK TOP 2900/3150	6
K4511381	PIN ROLL 1/16X5/8	25
K4510338	PIN ROLL 3/32X7/8 F/DRIVE CAM 25/2700	100
K4560090	PISTON 1500/2500/2700 (2510)	1
K4560090-HF	PISTON 2750/2900 (2700 HI BACKWASH FLOW-UPPER)	1
K4511842	POWER CORD 6' F/5600	6
K4513061	PULLER TOOL 1500/25/2510/27/2750	1
K4517623	PULLER TOOL 2850/9500	1
K4112	RO LOCKOUT SWITCH KIT W/CAM,PIN,SCREWS,NUTS, ETC	10
K4510220	SCREW FIL HD MACH #4X1.12 F/MICRO SWITCH	10
K4513748	SCREW, FLT HD ST 6-20 X 1/2" F/TOP SCREEN	100
K4560121	SEAL & SPACER KIT 2500/2750 (1500,2510,2700,2900 UPPER)	4
K4560129	SEAL & SPACER KIT 2850	1
K4560128	SEAL & SPACER KIT 2900 LOWER	4
K4560131	SEAL & SPACER KIT 3150 (3900 UPPER)	1
K4560132	SEAL & SPACER KIT 3900 LOWER	1
K4560125	SEAL & SPACER KIT 5600/9000 UPPER	6
K4560421	SEAL & SPACER KIT 9000 BOTTOM	1
K4560133	SEAL & SPACER KIT 9500 LOWER	1
K4560134	SEAL & SPACER KIT 9500 UPPER	1
K4511726	SEAL BYPASS 3600/5600	6
K4516516	STUFFER 2850/9500	1
K4511098	STUFFER TOOL F/15/25/2510/27/2750	1
K4560376-13	TIMER 9000/9500 METER 1/30 RPM 120V 60HZ	1
K4515416	TUBE, BRINE VALVE, 2900/1700	6

255 / 440i

Logix

Autotrol® valves

Autotrol® 255 plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K2001	255/440i	Softener TC	3/4"	N/A	120/60	Valve, brass piping boss, 12V trans	4
K2001B	255/440i	Softener TC	3/4"	N/A	120/60	Valve, Noryl® piping boss, 12V trans	1
K2000A	255/440i	Softener TC	3/4"	N/A	120/60	Valve only, 12V trans	1
K2000M	255440i	Softener TC	3/4"	N/A	120/60	Valve only	8
K2000AB	255/440i	Softener TC	3/4"	3/4" PVC	120/60	Valve, bypass, 12V trans	8
K2000MB	255440i	Softener TC	3/4"	3/4" PVC	120/60	Valve, bypass	8
K2000B	255/460i	Softener DEM	3/4"	N/A	120/60	Valve only, 12V trans	8
K2005	255/460i	Softener DEM	3/4"	N/A	120/60	Valve, brass piping boss, 12V trans	4
K2005B	255/460i	Softener DEM	3/4"	3/4" PVC	120/60	Valve, bypass, 12V trans	8

TC = time clock (mechanical) DEM = demand (metered)

Autotrol® 263 / 268 plastic valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K20263-1005	263/440i	Filter	1"	N/A	100/50	Valve only	8
K2026344-0126T	263/440i	Filter	1"	N/A	120/60	Valve only, w/12V trans	4
K2026344	263/440i	Filter	1"	N/A	120/60	Valve, cover, 1" PVC tails	4
K2026344-1206	263/440i	Filter	1"	N/A	120/60	Valve only	4
K2026344-1206B	263/440i	Filter	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails	1
K20268-1005	268/440i	Softener TC	1"	N/A	100/50	Valve only	8
K2026844-0126T	268/440i	Softener TC	1"	N/A	120/60	Valve only, w/12V trans	4
K2003	268/440i	Softener TC	1"	N/A	120/60	Valve, cover, 1" PVC tails	4
K2026844-1206	268/440i	Softener TC	1"	N/A	120/60	Valve only	4
K2026844-1206B	268/440i	Softener TC	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails	1
K2026846-0096T	268/460i	Softener DEM	1"	N/A	120/60	Valve only, w/12V trans	1
K2026846-0096TB	268/460i	Softener DEM	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails	4
K2026844FA	268FA/440i	Greensand	1"	N/A	120/60	Valve only, w/12V trans	1
K2026844FA-120	268FA/440i	Greensand	1"	N/A	120/60	Valve only	4
K2026844FA-120B	268FA/440i	Greensand	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails	1

TC = time clock DEM = demand (metered)

Valve shown with SeaTech® quick connect fittings. (See general catalog for more information.)

Logix® technology by Autotrol®

Benefits and features of the patented Logix® technology:

- 255 and Proform™ valves for flow rates to 25 GPM (valve only)
- High efficiency, high performance and dependable operation
- Two-way regeneration (time clock or regeneration by demand)
- 28 day variable reserve, learns family water usage to reduce costs
- Safe, low voltage operation cost as little as $1.00 per year!
- Manual override regeneration provides extra soft water when needed!
- LCD displays to indicate remaining capacity

Autotrol® 263 / 268 Logix valves

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K2026374-0126	263/740	Filter	1"	N/A	120/60	Valve only	4
K2026374-0126T	263/740	Filter	1"	N/A	120/60	Valve only, w/ IDT	4
K2026374-0126B	263/740	Filter	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails OD	1
K2026876-0126	268/760	Softener	1"	N/A	120/60	Valve only	4
K2026876-0126T	268/760	Softener	1"	N/A	120/60	Valve only, w/ IDT	4
K2026876-0126B	268/760	Softener	1"	1" PVC	120/60	Valve, cover, bypass, 1" PVC tails OD	4

OD = outdoor cover & transformer included. For indoor version, please specify when ordering IDT = indoor transformer

Autotrol® plastic Magnum CV valves (1-1/2")

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K2014	Magnum942	Filter	1-1/2"	N/A	120/60	TM valve, 7D	4
K2015	Magnum942	Softener	1-1/2"	N/A	120/60	TM valve, 7D	4
K2016-1	Magnum962	Softener	1-1/2"	N/A	120/60	TM, HWBP, 1" T PVC, w/trans	4
K2018	Magnum962	Softener	1-1/2"	N/A	120/60	TM, TA valve, NHWBP, 2" T PVC	4
K2018-2	Magnum962	Softener	1-1/2"	N/A	120/60	TM, TA, NHWBP, 2" T Brass	4

TA = twin alternating TM = top mount T = turbine HWBP = hard water bypass NHWBP = no hard water bypass D = day

Autotrol® plastic Magnum CV+ valves (2")

Part Number	Valve	Use	Pipe Size	By-Pass	Electrical	Description	Case Qty.
K2014+	Magnum942F	Filter	2"	N/A	120/60	TM valve, 7D	4
K2015+	Magnum942	Softener	2"	N/A	120/60	TM valve, 7D	4
K2017+	Magnum962	Softener	2"	N/A	120/60	TM valve, NHWBP, 2" IT	4
K2017-2+	Magnum962	Softener	2"	N/A	120/60	TM valve, HWBP, 2" IT	4
K2018+	Magnum962	Softener	2"	N/A	120/60	TM, TA valve, NHWBP, 2" IT	4

TA = twin alternating TM = top mount IT = internal turbine HWBP = hard water bypa NHWBP = no hard water bypass = day

Autotrol® valve parts

Part Number	Description	Case Qty.
K221240601	COVER, OUTDOOR, W/FRONT INSERT, LOGIX, UV LT GRAY	1
K2299F-1	TRIPPER ARM 6 DAY	6
K221235448	TRANSFORMER, OUTDOOR, 120 TO 12 VDC	1
K2298F-1	MOTOR 440 TIMER 120V 60HZ	20
K2298F-3	MOTOR 440 TIMER 24V 60HZ	1
K221041174	KIT VALVE DISC F/263, 268, 269	20
K22100A213-801	KIT VALVE DISC F/255	6
K22155A152	KIT VALVE DISC F/155, 168, & 730	24
K22440I	KIT TIMER ASSY. 440I 6 DAY W/TRANSFORMER 120V 60HZ	1
K22440I-120	KIT TIMER ASSY. 440I 6 DAY 120/60 W/POWERCORD	1
K2201F-19	KIT BRINE CONTROL ASSY. 19LBS 100N108G2 1032996	24
K221000811	KIT 460I & 960, LOGIX INDOOR, TRANSFORMER	4
K221030272	INJECTOR "D" SIZE GREEN	20
K2228F-CC	INJECTOR "C" SIZE RED	24
K2228F-BB	INJECTOR "B" SIZE BLUE	24
K2304E-1	GEAR BLK 118 MIN-STD (420A43)	20
K2304E-3	GEAR BLK (420A44)	20
K221040763	FLOW CONTROL INSERT BLANK	20
K221040762	FC DISC BLANK W/O-RING F/5-40 GPM	1
K221002449	DRAIN FITTING 0.75" FNPT X 0.50" BARB (P8FE12-G)	20
K221236246	COVER, INDOOR, LOGIX, DK GRAY	1
K221040402	COVER I-LID F/263 & 268: OPT 255/460I	24
K221231264	AIR CHECK ASSY. OLD STYLE (REPLACES 36F)	20

Fleck by-pass valves are shown at left

Fleck by-pass valves

Part Number	Description	Case Qty.
K4560040SS	5600 BYPASS VALVE .75" SS	12
K4560041SS	5600 BYPASS VALVE 1.00" SS	12
K4560049	BYPASS PLASTIC (NEEDS 3/4" OR 1" YOKE)	24
K4560049-04	BYPASS PLASTIC 1" W/ .75" PLASTIC YOKE	6
K4560049-02	BYPASS PLASTIC 1" W/1.00" NPT SS YOKE	6
K4540569	BYPASS, 7000	18
K4518706-02	YOKE .75" NPT PLASTIC NPT F/5000	6
K4513708	YOKE .75" SS NPT	24
K4518706	YOKE 1.00" NPT PLASTIC F/5000	6

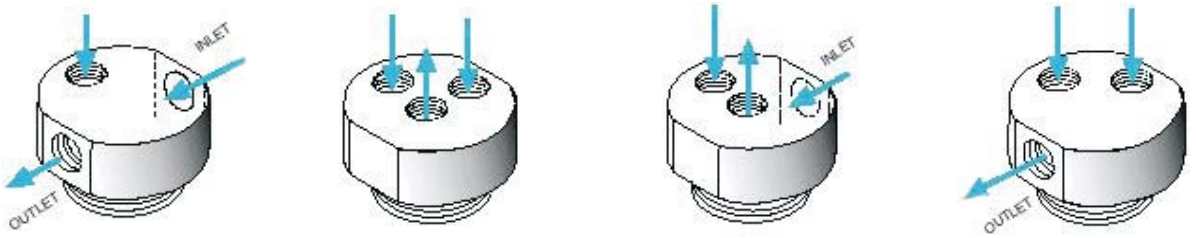
Autotrol® by-pass valves

Part Number	Description	Case Qty.
K2101-ASSY	256 BYPASS F/255 WO/ADAPTERS	24
K2101B	256 BYPASS F/255 W/1.0" PVC ADAPTER	24
K2101A	256 BYPASS F/255 W/.75" PVC ADAPTER	1
K2101C	256 BYPASS F/255 W/.75" COPPER ADAPTER	24
K221040393	KIT TAIL 1.00" PVC (2@ ADAP, NUT, GASKET) CPVC MAT'	24
K221040392	KIT TAIL .75" PVC (2@ ADAP, NUT, GASKET) CPVC MAT'L	24

Taras by-pass valves

Part Number	Pipe Size	Material	Comment	Case Qty.
K5065	3/4"	Plastic	Manual valve with adapters	1
K5065A	1"	Plastic	Manual valve with adapters	1
K5065B	1"	Plastic	Mipxunion without adapters	1
K5177136	1"	N/A	Mipxunion adaper (requires o-ring K5177140)	10
K5177140	3/4" OR 1"	N/A	By-pass Taras o-ring (for 3/4" or 1" adapter)	25

Tank Heads & Components



Tank Heads

Part Number	Description
Tank head, injection molded with o-ring	
Q6040B	3/4" ABS, 890-S w/ brass inserts, 13/16" riser
Q6041B	3/4" ABS, 890-S w/o inserts, 13/16" riser
Q6041	3/4" ABS, 890-S w/o o-rings w/o inserts, 13/16" riser
Q5850	3/4" Poly, 3 hole, 2.5" #8 w 3/4" FNPT for riser, 13/16" riser
Q3020	1/4" Poly in/out 2.5" #8 w/ MPU-14 screen, 3/4" FNPT riser
Q4338E	O-ring EPDM for Q5850 & Q3020
Tank head, glass filled Noryl with o-ring	
KC11V1190	3/4" x 3/4" head
KC11V1190FP	3/4" x 3/4" head with 3/4" fill port
Tank head, polypropylene glass filled	
QMH2587S	3/4" in/out, 13/16" riser, blue

PVC Tank heads

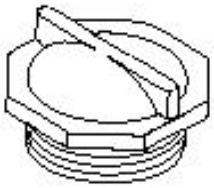
Part Number	Description	Center Riser Hole
Side ports		
Q3025	2.5" x 1/4" w/ 3/4" fill hole & plug	3/4" NPT offset
Q8040	2.5" x 3/8"	13/16"
Q8040-.75	2.5" x 3/8" w/ 3/4" fill hole & plug	13/16"
Q8042	2.5" x 1/2"	13/16"
Q8042-.50	2.5" x 1/2" w/ 1/2" fill hole & plug	13/16"
Q8042-.75	2.5" x 1/2" w/ 3/4" fill hole & plug	13/16"
Q8044	2.5" x 3/4"	13/16"
Q8044-.7	2.5" x 3/4" w/ 3/4" fill hole & plug	13/16"
Q8044-1	2.5" x 1"	1.05"
Q8044-2	2.5" x 3/4" w/ 3/4" fill hole & plug/inlet screen	13/16"
Q8044-DS	2.5" x 3/4" w/ 1/8" vent hole	13/16"
Q8048	4" x 1"	1.05"
Q8048-.75	4" x 1" w/ 3/4" fill hole & plug	1.05"
Q8048-1.0	4" x 1" w/ 1" fill hole & plug	1.05"
Q8047-1.5	4" x 1.5"	1.5"
Q8049-1.5	4" x 1.5" w/ 3/4" fill hole & plug	1.5" NPT offset
Q8052	4.5" x 1"	1.05"
Q8052-1.0	4.5" x 1" w/ 1" fill hole & plug	1.05"
Top ports		
Q8056	2.5" x 1/2"	13/16"
Q8056-.75	2.5" x 1/2" w/ 3/4" fill hole & plug	13/16"
Q8060-.75	4" x 3/4" w/ 3/4" fill hole & plug	13/16"
Q8062	4" x 1"	1.05"
Q8062-1.0	4" x 1" w/ 1" fill hole & plug	1.05"
Q8066-1.0	4.5" x 1" w/ 1" fill hole & plug	1.05"
Side-inlet / Top-outlet		
Q8072	2.5" x 3/4"	13/16"
Q8078	4.5" x 3/4"	13/16"
Q8080	4.5" x 1"	1.05"

Tank Components Continued

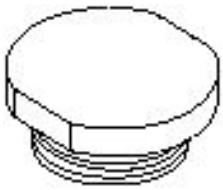
Closures, adapters, bushings and couplings

Tank Heads

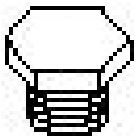
Part Number	Description
Closure, ABS	
C2201	2-1/2” #8
Adapter, ABS	
C2211	4-1/2” #8 x 2-1/2” FPT
C2212	4-1/2” #8 x 4” FPT
O-ring	
C2213	2-1/2” #8
Closure, PVC / ABS	
Q7001	2.5” #8 PVC
Q7004	2.5” #8 ABS
Q7006A	4.5” #8 PVC
Q7008	6” #8 PVC
Q3060	6” #8 ABS
Q7010	6” #8 Bolt flange closure PVC
Fill Plugs – injection molded	
Q7002	3/4" PVC
Q7002-P	3/4" Nat. Poly
Fill Plugs – machine, with o-ring	
Q7014	1/2” PVC
Q7012	1” PVC plug
Q7000	1.25” PVC



ABS closure



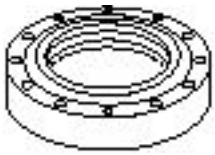
PVC closure



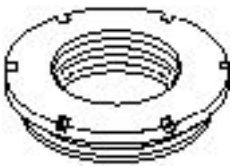
Fill plug

PVC machined bushings / couplings

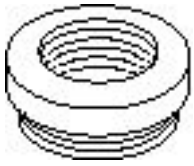
Part Number	Description
2.5” (M x F)	
Q8006	2.5” #8 x 1” NPT
Q9013C	2.5” #8M X 2.5” #8M cplr w/ upper & lower dist., 1.05” cntr
3.0” (M x F)	
Q9012	3” #8 x 2.5” #8
4” (M x F)	
Q8031A	4” #8 x 1.5” NPT, Top/Bottom
Q8032A	4” #8 x 2” NPT, Top/Bottom
Q9029	4” #8 x 2.375” Socket
Q9031	4” #8 x 2.5” #8
4.0” for SO HUB (F x F)	
D2210H	4” #8 x 2.5” #8
D2210H	3 4” #8 x 3” #8
4.5” (M x F)	
Q9033	4.5” #8 x 4” #8
Q9037	4.5” #8 x 2.5” #8 PVC
6.0” (M x F)	
Q8035A	6” #8 x 2” NPT, Top/Bottom
Q3064	6” #8 x 4” #8 ABS injection molded
Q9055	4.5” #8 x 4” #8



Q9058



Q3064



Q8031A

Tank Components Continued

PVC machined flanges

Part Number	Description
Q7011-3S	3” x 3” wider bolt pattern for structural 63” tank only
Q9065	6” x 2” NPT (in) top & bottom, 1” NPT (out) top & bottom
Q9058	6” x 4” x #8

A & M In/Out system (Glass filled Noryl)

Part Number	Description
D3020	6” #8 x 2”
D3030	6” #8 x 2”-1/2” x3”
D3040	6” flange x 2”-1/2” x3”
D3050	6” flange x 2”

Stainless steel bolt set

Part Number	Description
D3341	Set of 12 for Structural, A&M flange
D3342	Set of 12 for Park International, A&M flange
D3343	Universal set for Park or Structural (3 sizes of bolts, 36 qty total)

O-ring

Part Number	Description
DD3346	4” on system #346 (insert)
D3362	6” on system #362 (threaded adapter)
D3343	7-5/8” on flanged adapter
I2037	Wrench for 6” (fits all styles)

Note: These o-rings are sealed plastic parts. Do not over tighten (stress crack may result).

ASME Composite Flanged Only, (natural color)

Part Number	Size	Top	Bottom	Base	Cu.Ft. Capacity	Weight (lbs.)
C1041A	24 x 72	6” Flange	6” Flange	Tripod	15.9	172
C1042A	30 x 72	6” Flange	6” Flange	Tripod	23.8	280
C1043A	36 x 72	6” Flange	6” Flange	Tripod	33.1	324
C1044	42 x 72	6” Flange	6” Flange	Tripod	45.4	708
C1045	48 x 72	6” Flange	6” Flange	Tripod	61.9	813

ASME composite tanks are special order items.

Integrally molded reinforced opening

Sight glass available

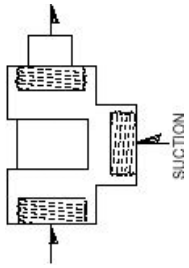
Tripod base standard

PVC Eductors

Aquamatic Diaphragm Control Valves*

Part Number	Model Number	Color	Size
K1075-4	540-4	White	1/2" NPT
K1075-5	540-5	Blue	1/2" NPT
K1080-1	541-1	Red	3/4" NPT
K1080-2	541-2	White	3/4" NPT
K1080-3	541-3	Blue	3/4" NPT
K1085-1	542-1	Red	1" NPT
K1085-2	542-2	White	1" NPT
K1085-3	542-3	Blue	1" NPT
K1090-1	544-1	Red	1-1/2" NPT
K1090-2	544-2	White	1-1/2" NPT
K1090-3	544-3	Blue	1-1/2" NPT
K1090-4	544-4	Yellow	1-1/2" NPT
K1095-1	546-1	Red	2" NPT

*Max operating temp: 140˚F, Operating pressure: 20-125 psi



Eductors sizing (model number indication chart)

Tank Size D" x H"	0-50 psi	50-90 psi	Over 90 psi
18 x 54	541-2	541-1	540-5
18 x 60	541-2	541-1	540-5
20 x 48	541-2	541-2	540-5
20 x 54	541-2	541-2	540-5
20 x 60	541-3	541-2	541-1
24 x 60	541-3	541-2	541-2
24 x 72	542-1	541-3	541-3
30 x 60	542-2	542-1	541-3
30 x 72	542-2	542-1	541-3
36 x 60	542-3	542-2	542-1
36 x 72	544-1	542-3	542-2
42 x 60	544-1	542-3	542-2
42 x 72	544-2	544-1	542-3
48 x 60	544-2	544-1	542-3
48 x 72	544-3	544-2	544-1
54 x 60	544-3	544-2	544-1
54 x 72	544-4	544-3	544-2
60 x 60	544-4	544-3	544-2
60 x 72	544-5	544-3	544-2
66 x 60	544-5	544-3	544-2
66 x 72	546-1	544-3	544-3
72 x 60	546-1	-	544-3
72 x 72	-	546-1	544-4
78 x 60	-	546-1	544-4
84 x 60	-	546-1	-
90 x 60	-	-	546-1

Section 3

Filter Media and Ion-Exchange Resin

MICRO-Z™

Superior filtration media

Alamo's Micro-Z™ granular filter media outperforms conventional multimedia materials due to its unique structure, allowing particulate to penetrate deeply into the filter bed to provide superior filtration at increased flow rates.

Physical properities

Color	Light green
Bulk density	55 lbs. per cu. ft.
Specific gravity	2.2 gm/cc
Mesh size	14x40
Uniform coefficient	1.9
Hardness (Mohs scale)	4

Conditions of operation

Recommended bed depth	36" - 48"
Recommended freeboard	50% of bed depth
Service flow rate	12-20 GPM/sq. ft.
Backwash flow rate	12-16 GPM/sq. ft.
Backwash bed expansion	30-40 percent
Note: Allow bed to soak overnight before initial backwash.	

Features & benefits

- Higher solids loading capability
- Superior filtration performance
- Reduced backwash frequency
- Removes finer particles
- Reduces pressure drop
- Provides higher flow rates
- Light weight
- Reduces shipping costs
- Easy to handle

MICRO-Z vs Conventional Filter Media

Media	Nominal Micron Rating	Loading Capacity
Sand	20	1.0 X
Sand & Anthracite	15	1.4 X
Multimedia	12	1.6 X
Micro-Z	5	2.8 X

Micro-Z loading information

Vessel Diameter (Inches)	Media Quantity A7200 (Cubic Ft.)	Under Bed A7005 (Lbs.)	Service Flow Rate	Backwash Flow Rate (GPM)
9	1	12	5-9	5
10	1.5	15	7-10	7
12	2	25	9-15	10
14	3	40	13-21	15
16	4	55	17-28	20
22	6	100	30-50	32
24	8	200	38-62	40
30	10	300	59-98	60
36	20	500	85-140	85
42	30	700	115-190	110
48	40	900	150-250	150

Ordering information

Part Number	Description	Cubic Foot	Weight (Lbs.)	Package
A7200	Micro-Z	1	55	Bag
A7200-B	Micro-Z	40	2,200	Super Sack

Filox-R™

Iron, Hydrogen Sulfide, and Manganese Removal

Filox-R™ media

Filox-R™ media is an economical Iron and Hydrogen Sulfide filtration media that out performs traditional Greensand and Birm.

Features & benefits

- Superior high efficiency media for filtration and removal capabilities
- No oxidizing chemicals needed for regeneration.
- High efficiency with 80% manganese dioxide for enhanced performance and capacity.
- Effective, from 5.0 pH to 9.0 pH
- Highest flow rate of any standard iron removal media.

Operating Conditions

Active Ingredient	75-85% Manganese Dioxide
Service Flow	6 gpm/cu.ft.
Freeboard	30-50%
Backwash rate	12-15 gpm/sq.ft @ 60F
Bed depth	20 inch Minimum
pH Range	5.0 – 9.0
Screen size	12 x 40
Bulk density	114 lbs/cu.ft.
Removal Capacity	
Iron	15.0 ppm
Hydrogen Sulfide	7.0 ppm
Manganese	3.0 ppm

Comparitive information

Product Name	Active Ingredient	Relative life
Birm	< 0.01% Manganese Dioxide	1
Greensand	0.5% Manganese Dioxide	50 X birm
Filox-R™	75% - 85% Manganese Dioxide	7500X birm

Ordering information

Part Number	Description	Cubic foot	Weight (Lbs.)	Package	Pallet Qty
A8033	Filox-R™ media	0.5	57	Bag	37

The use of additional oxidizing agents (oxygen, chlorine, ozone, hydrogen peroxide, potassium permanganate, etc.) is recommended. Oxidizers will not adversely affect Filox-R™. As a matter of fact, they will enhance its performance. They super-oxidize the media, which enables Filox-R™ to perform quicker and keep cleaner. It is always a safe practice to install an oxidation method upstream (in front) of the Filox-R™ bed.

Testing for ORP

Oxidation Reduction Potential (ORP) can be the most important factor to take into consideration in certain waters. Highly reducing waters may cause premature exhaustion or even destruction of the Filox-R™ bed. Precautions can be taken prior to installation that can prevent ORP problems. Use one of the screening tests and follow the instructions below if the subject water has reducing properties that will require additional oxidants.

Simple test

Mix 1.75 ounces (50 grams) water with 0.75 ounces (22 grams) of potassium permanganate crystals.Then take 2 drops of the mixture and stir into a fresh 1/4 gallon (1 liter) sample of the subject water. Let the subject water stand for 15 minutes. If the pink color remains, Filox-R™ can be installed without additional oxidants. If the pink color disappears, additional oxidants will be needed for Filox-R™ to function properly.

ORP meter test

Note: Must use a calibrated ORP meter. Any reading that is above a negative 170 millivolts indicates that Filox-R™ can be used effectively without additional oxidants. Any reading falling below a negative 170 millivolts indicates that additional oxidants will be required.

Activated Carbon Media

Granular activated carbon

Activated carbon (AC) is a natural material derived from bituminous coal, lignite, wood, coconut shell etc., activated by steam and other means. Carbon is very popular due to its ability to correct many water quality problems.

Benefits

- Improve taste and remove odors
- Dechlorination of water
- Remove color from water
- Removal of organic substances
- Removal of synthetic organic substances
- Clear water for drinking, bathing and cooking!

Adsorption Influencing Factors

Temperature Most effective 60°F - 80°F.

pH Most organics in water are more soluble at pH lower than 7.0.

Contact time Very important to achieve proper flow rates for any adsorption system to function properly.

Carbon media types

Bituminous Basic coal based granular media

Coconut shell Superior level of hardness; high activity level; trihalomethane removal; longer life expectancy;

Acid washed Increases adsorptive capacity of carbon base and lowers the level of impurities.

Catalytic Specialized carbon media to remove hydrogen sulfide gas and chloramines.

Standard Operating Conditions

Service flow rate	2 - 6 gpm/cu.ft.
Freeboard	20%
pH	6.5 – 7.5

Contaminates adsorbed

- Chlorine
- Organic Chemicals
- Fertilizers
- TCE (Trichloroethylene)
- EDB (Ethylene dibromide)
- THM (Trihalomethanes)
- Sediment
- Chemical odor
- Pesticides
- Detergents
- Chloramines

Note: Service flow rates are calculated at 2-6 gpm/ft^3 for standard taste, odor and chlorine removal application using bituminous carbon. Chloramines and TDS applications will require lower service flow rates and longer empty bed contact time or specialized carbon formulations.

Ordering information

Part Number	Description	Type	Mesh	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A8056	Calgon Centaur® carbon	Catalytic	12 x 40	1	33	40
A9029-C	Calgon CPG LF30 acid washed, low fines	Bituminous	8 x 30	2	30	80
A9030A	Acid washed, low fines	Bituminous	12 x 40	1	27.5	40
A9030-C	Calgon F-200 acid washed, low fines	Bituminous	12 x 40	1	31	40
A9030-CPGLF	Calgon CPG LF40	Bituminous	12 x 40	2	55	80
A9031A	Carbsorb™ 40	Bituminous	12 x 40	1	27.5	40
A9031-C	Calgon F-400 low fines	Bituminous	12 x 40	1	27.5	40
A9032A	Carbsorb™ 30	Bituminous	8 x 30	1	27.5	40
A9032-C	Calgon F-300, low fines	Bituminous	8 x 30	1	27.5	80
A9044A	Calgon 20 x 50 mesh media	Bituminous	20 x 50	1	27.5	8
A9231-A	Calgon coconut shell carbon media	Coconut	12 x 40	1	27.5	40

SAFETY MESSAGE: Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate procedures for potentially low-oxygen environment should be followed.

Centaur® Granular Activated Carbon

Hydrogen sulfide and chloramines removal

Part # A8056

CENTAUR® 12x40 is a liquid phase virgin activated carbon that has been manufactured to develop catalytic functionality. The product is unique in that it concentrates reactants via adsorption and then promotes their reaction on the surface of the pores.

Features & benefits

- Catalytic activity allows for smaller more compact system sizing and lower capital requirements.
- No safety concerns with exotherms or toxicity like some impregnated medias.
- Improved trace organic capacity per unit volume.
- High hardness reduces fines and losses do to handling.
- Works with low oxidant levels and limits the need for chemicals.
- Simple and reliable equipment design that can handle spikes in consentration without metering of chemicals.
- Reduced carbon requirements reduce operating costs.
- Enhanced carbon media performance for a greater degree of contaminant removal at reduced costs.
- Thermal reactivation is an option for recycle and reuse to minimize operating costs and eliminates disposal concerns.

Properties

Carbon base	Bituminous
Peroxide No.	14 max
Iodine No.	825 mg/g min
Ash (by weight %)	7 max
Moisture (by weight %)	3 max
Abrasion No.	75 min
Apparent density	0.56 g/ml min
Through 12 mesh %	5 max
Through 40 mesh %	4 max

Applications

- Chloramines
- Hydrogen sulfide
- Taste and odor
- VOC removal
- Iron removal
- Residential water filters
- Commercial water filters
- Bottling and soft drink industries
- Aquarium water treatment

Design considerations

CENTAUR® 12x40 is produced from bituminous coal using a patented process for the use in liquid phase systems to promote catalytic reactions. The reactant concentration determines the effective contact time. Although it is not impregnated with metals or alkali, it displays the catalytic functionality of these materials.

Ordering information

Part Number	Description	Type	Mesh	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A8056	Calgon Centaur® carbon	Catalytic	12 x 40	1	33	40

Safety message: Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low oxygen spaces should be followed, including all applicable federal and state requirements.

Additional Media Types

Sand

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A7002A	Filter sand 0.45-0.55 mm	Sediment turbidity	1	50	56
A7003A	Filter sand 0.6-0.8 mm	Sediment, turbidity	1	50	56
A7004A	Filter sand 0.8-1.2 mm	Sediment, turbidity	1	50	56

Gravel

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A7005A	Gravel flint #20 1/8"x1/16" red marking	Sediment, bed support	1	50	56
A7006A	Gravel 1/4"x1/8" orange marking	Sediment, bed support	1	50	56
A7007A	Gravel 1/2"x1/4" black marking	Sediment, bed support	1	50	56

Anthracite

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A7051	Anthracite #1.5 (0.85-0.95 mm) blue bags	Sediment, turbidity	1	52	50
A7052	Anthracite #2 (2-4 mm) yellow bags	Sediment, turbidity	1	52	50

Garnet

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A7080-50	Garnet #012 (1.45-1.7 mm)	Sediment, turbidity	1	50	80
A7084-50	Garnet #036 (0.5-0.65 mm)	Sediment, turbidity	1	50	80
A7085-50	Garnet #030/40 (0.32-0.39 mm)	Sediment, turbidity	1	50	80
A7086-50	Garnet #050 (0.24-0.33 mm)	Sediment, turbidity	1	50	80

Birm

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A800	Birm (regular)	Iron, HS reduction	1	44	40

Greensand

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A8041	Manganese greensand	Iron, HS reduction	1	85	25
A8041-P	Greensand Plus	Iron, HS reduction	0.5	42	50

Neutralizer

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A8012A	Flomag PWT Magnesium Oxide -similar to Corsex	Neutralizer	0.5	50	60
A8021-50	Calcite	NSF Neutralizer	0.5	50	60

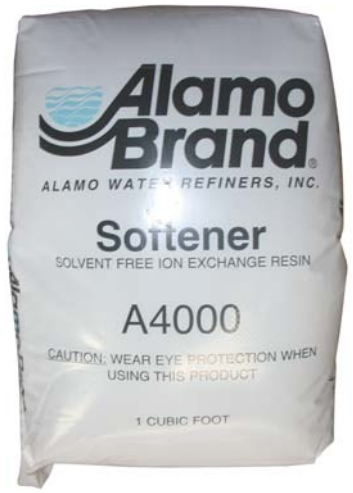
KDF

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A5001	KDF-55	Chlorine reduction	Drum	57	48
A5005	KDF-85	Fe, Chlorine reduction	Drum	57	48

Misc.

Part Number	Description	Application	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
A8014-FL	Filter Lite	Sediment, turbidity	1	25	80

Ion Exchange Resin



Alamo Brand A4000 Resin

Alamo brand A4000 resin is a high purity, premium grade, prewashed, strong acid gel-type cation exchange resin specially designed for residential water treatment. A4000 is a bead type, cross-linked, polystyrene divinylbenzene resin that offers excellent bead integrity and very low extractables.

Design conditions

Bed depth	>30 in
Flow rate	2-5 gpm/ft3
Freeboard	50-75%
Backwash expansion	50-75%
NaCl concentration for regeneration	5-25%
NaCl flow rate for regeneration	0.25-0.5 gpm/ft3
Turbidity	<5.0 NTU
Free chlorine	<1 ppm

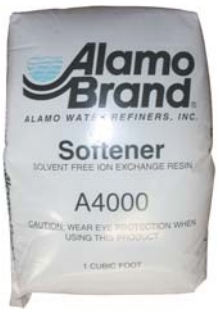
Resin properties

Type	8% crosslink polystyrene
Form	Gel- type, light amber bead
Ionic form	Na+ (as shipped)
Functional group	Sulphonic acid
Bead siz	16 x40 mesh
Effective size	0.45 ± 0.07 mm
Bulk density	53 lb/ft3
Real density	1.28 g/cm3
Bead count	>95%
Water retention	45-48%
Total capacity	>2.0meq/l
Volume change	Na+ - H+ <5%
Stability, temp.	<300°F
Stability pH	0 – 14

Ordering information

Part Number	Description	Application	Ionic Form	lbs. Cu.Ft.	Cu.Ft. Pallet
CATION					
A4000	Alamo Brand NA black resin	Softening	NA	52	42
A4004	Purolite C-100E NA Strong Acid	Softening	NA	52	42
A4005	Purolite C-100FM NA fine mesh	Softening	NA	52	42
A4012	Purolite C-100H H+ strong acid	DI	H+	52	25
A4016*	Purolite C-100X10 strong acid 10% crosslink	Softening	NA	54	25
A4040H	Purolite C100x10SG H+ strong acid	DI	H+	52	25
A4024	Purolite C-150 strong acid macroporous	Condensate polishing	NA	50	25
A6001	Sybron C-249 strong acid	Softening	NA	50	40
A6007	Sybron C-266 fine mesh	Softening	NA	50	40
ANION					
A4040	Purolite A-400 CL Type I strong base	DI	CL	43	25
A404OH	Purolite A-300 OH Type II strong base	DI	OH	43	25
A4044	Purolite A-300 CL Type II strong base	DI	CL	44	25
A4050	Purolite A-520E CL Nitrate strong base	Nitrate removal	CL	42	25
A4056OH	Purolite A-500 OH Type I Macro	DI	OH	43	25
A4064	Purolite A-500P CL Type I Macro DI	CL	43	25	
A4073	Purolite A-850 CL acrylic gel	Tannin removal	CL	43	25
MIXED BED – (mixed beds are 1:1 chemical equivalent)					
A4140	Purolite NRW-37 Nuclear grade H/OH	DI	H/OH	50	drum
SPECIALITY					
A4073-X	Purolite Tannex	Tannin removal	CL	50	40

Ion Exchange Media Cross Reference Chart



Alamo Part #	Purolite Part #	Bayer Part #	ResinTech Part #	Rohm & Haas Part #	Duolite Part #	Dow Part #	Sybron Part #	Culligan Part #
Weak acid cation resin acrylic								
	C105 Gel		WACMP	IRC-84 Gel	C-433 Gel	CCR-2/3	CC	
A4006	C106			IRC-86	C-464	MWC-1		
Strong acid cation exchange gel-type								
A4000	C100/E	KPS Black	CG8	IR-120 PLUS	C-20	HCR-S	C249 (A6001)	CH-1
A4012	C100 (H)	KPS (H)	CG8-H	IR-120+H		HCRS-H	C267	CH-1-H
A4018	C100EG			IR-130C			C253	
	PFC100	KPS-MB				HCRW2	C298C	
A4005	C100FM	KPS2540				Marathon-C		
A4016	C-100X10	KP10	CG10-Na	IR-122	C225	HGR	C-250	CH-3
A4016					C20X10			
Strong acid cation exchange macroporous type								
A4024	C-150	KS11	SACMP	IR-200	C-26, 261	MSC-1	CFP-110	CH-4
	C-160	KS10		IR-252	C-265/286	88	CFP-110X	
	C-150C			IR-200C				
Weak base anion exchange macroporous type								
	A845 /A847			IRA68		WGR-2EPOX.AMI	SR8	
		AD41			A-368		AFP-329	
A4076	A-100		WBMP	IRA-93/94	392	MWA-1	AFP-329	CW-3
A4076							A365 GEL	
	A-870			IRA35	A374/375			
Strong base anion exchange Gel								
A4036	A-600	SW-32	SBG1	IRA-400	A-109, 113	SBR	ASB1	CS-1
A4040	A-400	SW-31	SBG1P	IRA-402	A-101/143	SBRP	ASB1-P	CS-1P
A4044		SW-31MB		Ambersep 420			ASB-2	
	A-300	SBK	SBG2	IRA-410	A-116	SAR	ASB2	CS-2
		SBK MB						
Strong base anion exchange macroporous								
A4056OH	A-500	SZ-30	SBMP1	IRA-900	A-161	MSA-1	A-641	CS-3
		SZ-30MB						
	A-510	SL-30		IRA-910	A-162	MSA-2/22	A-651	
A4064	A-500P			IRA-904	A-171/191		A-642	
Strong base anion exchange macroporous acrylic-base								
A4073	A-860		SBACR1	IRA-458	A-132/172			
Specialty resins								
A4073-X	Tannex							
A4050	A-520 E							
Mixed bed – nuclear grade (low chloride)								
A4140	NRW-37	RM/SC	MBD-10	IRN-150		MR-3	NM60 (A6010)	CM-2

Media Loading or Replacement Procedure

Media loading or replacement for water softeners or filters is sometimes required for units in the field. Replacement of media is relatively simple, if the following procedure is followed:

Replacement of Media

Simplex Unit - Open bypass valve and close inlet/outlet isolation valves.

Duplex Unit - Close inlet/outlet isolation valve of unit to be rebedded.

Manually turn timer dial to backwash position (Manual Regeneration) to relieve vessel pressure.

Unplug electrical connection of unit.

Disconnect inlet, outlet, drain, and brine lines. Unscrew valve head from tank.

Remove distribution tube from tank and visually inspect for any damage or wear— replace if necessary.

Empty media into a vessel with resin trap/strainer, to retain the resin/gravel and allowing water to drain. Dispose of used media. Relocate softener tank in original location.

Loading of Media

Install distribution tube in mineral tank. Place a cap or tape over the open end of distributor to prevent any media from entering.

Fill tank approximately one-third with water to act as a buffer.

Slowly pour the required amount of media in each vessel: Gravel to be loaded first. Resin to be loaded second.

Clean top of tank and tank threads of any resin or gravel. Removecap or tape from distribution tube and clean. Visually check and clean valve and distribution “O” Ring of any foreign matter and lubricate with silicone or soap.

NOTE: Do not use Vaseline or grease.

Locate control valve on tank making certain riser tube is centered. Tighten valve to tank.

Reposition and level tank if necessary to assure proper alignment.

Connect inlet, outlet, drain, and brine connections

Media-G2R® For Arsenic Reduction

Media G2R®

Media G2R®, for residential Arsenic reduction, uses a highly effective patented process, whereby two components are combined to produce a unique water treatment media, which outperforms conventional Arsenic reduction materials.

Media G2R® properties

Empty bed contact time	5 – 10 min.
Freeboard	50 %
Backwash rate	2 gpm/ft2
pH range	5.5 – 8.5

Advantages

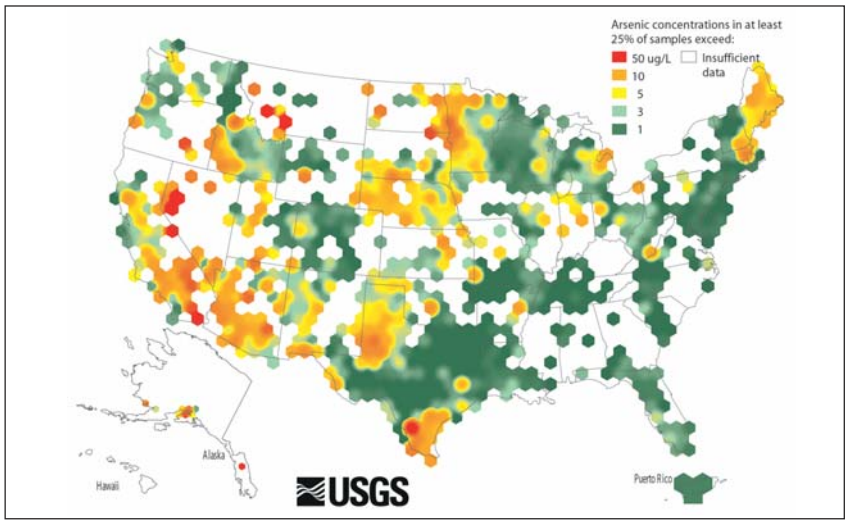
- Adsorbs both Arsenic III and Arsenic V
- NSF Standard 61 Certified
- Long life expectancy to reduce costs
- EPA / ETV Performance verified
- Low backwash rate
- Less water consumption (compared to sand media and Manganese Greensand)
- Exhausted media is non-hazardous
- Performs over a wide range of pH (5.5 to 8.5)
- Engineered for residential applications

Ordering information

Part Number	Description	Type	Cubic Feet per bag	Container Wt. (Lbs.)	Per Pallet
MEDIA G2 R	Arsenic reduction media	Resin	1	41.5	32

Note: Water quality varies through out the world, we recommend a water analysis to determine if any additional water treatment will be required prior to a Media G2R® arsenic reduction system. Pretreatment may be necessary to ensure proper performance of Media G2R®.

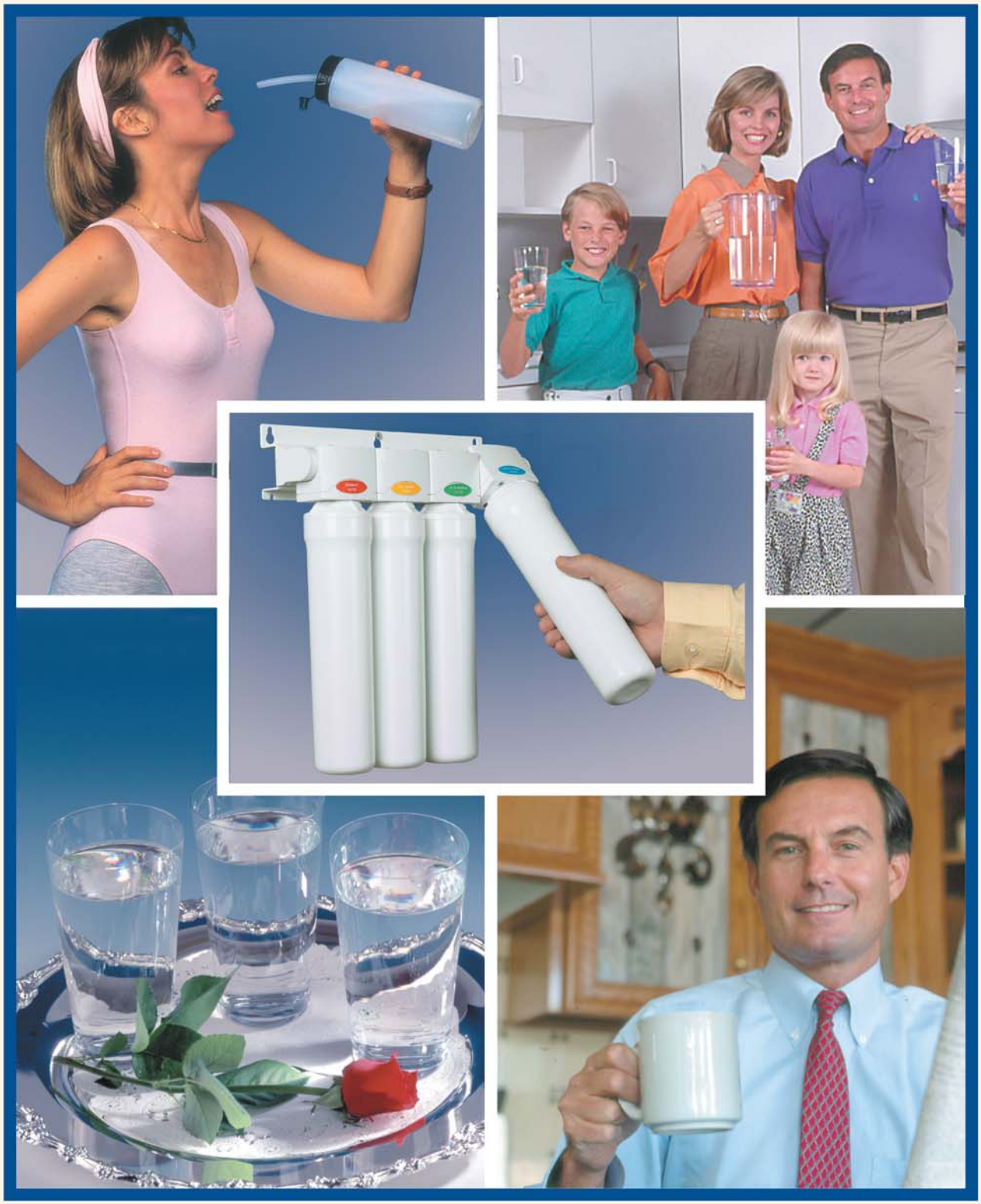
Arsenic concentration map for the United States



Note: US map is not detailed enough to accurately reflect water quality in any specific area. We highly recommend testing for Arsenic.

Arsenic is a naturally occurring element found in ground water in many parts of the world. The World Health Organization and the U.S. EPA recognize Arsenic as a carcinogen and have determined it may cause longterm adverse health effects in concentrations above 10 ppb.

Section 4



Water Quality Improvement Products

New Watts® ROs with Kwik-Change™ Cartridges

Simply the "best" of the best"!

Internal valve shuts-off flow during cartridge and membrane replacement.

Hinge bracket for easy cartridge removal and replacement.

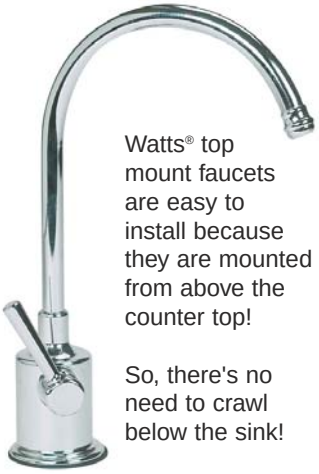
Cartridge replacement is so easy, you or the homeowner can do it!

Proprietary filter cartridges and membranes are installed and removed by a simple 1/4 turn.

Cartridges have double o-rings to prevent leakage.

Systems have integrated check valves between the cartridges and membranes to prevent back-flow for water quality assurance.

Our highly popular RO-PRO® storage tanks and top mount faucets are standard. RO-PRO® tanks are only 9" in diameter,and they are NSF component certified.



Watts® top mount faucets are easy to install because they are mounted from above the counter top!

So, there's no need to crawl below the sink!

Models

Model Number	Stage	Capacity (GPD)	Size Elements	Faucet	Tank
WQC4RO11-50PT	4	50	11"	Top mount	RO-PRO®
WQC4RO11-50MT	4	50	11"	Top mount	Metal
WQC4RO13-100PT	4	100	13"	Top mount	RO-PRO®
WQC4RO13-100MT	4	100	13"	Top mount	Metal

Note: All models listed above use 3/8" tubing from unit to tank to faucet. All models come with designer, top mount air gap faucets.

Replacement elements

Model	Element	Sediment	Carbon	Membrane	GAC
50 GPD System	11"	WQCSC11	WQCCC11	WQCM11-50	WQCGAC11
100 GPD System	13"	WQCSC13	WQCCC13	WQCM13-100	WQCGAC13

Watts® Kwik-Change™ ROs for Coolers

Features and benefits

- Cartridges connect directly to the unit by a simple 1/4 turn.
- Filter housings are eliminated. No mess during cartridge replacement!
- Internal valves shut-off flow when cartridges are removed.
- Cartridges have double o-rings so they won't leak.
- Compact design, so the unit requires less space below your sink!
- All components are an integral part of the unit, requiring fewer tube connections.
- Back-flow prevention valves are installed between the elements.
- Cooler models provide three 1/4" connections (inlet, outlet & waste).

Models

Model Number	Stage	Capacity (GPD)	Cartridge Size	No. Per Case
WQCRO4-10-3514	4	35	10"	1
WQCRO4-11-5014	4	50	11"	1
WQCRO4-13-10014	4	100	13"	1

Replacement elements for all Kwik-Change RO systems

10”

Part Number	Type	Use	Size	No. Per Case
WQCSC10	Sediment	Pre-filtration	10"	32
WQCCC10	Carbon block	Pre-filtration	10"	32
WQCGAC10	GAC	Post-filtration	10”	32
WQCM10-35	Membrane	Primary filtration	10"	32

11”

Part Number	Type	Use	Size	No. Per Case
WQCSC11	Sediment	Pre-filtration	11"	25
WQCCC11	Carbon block	Pre-filtration	11"	25
WQCGAC11	GAC	Post-filtration	11"	25
WQCM11-50	Membrane	Primary filtration	11"	25

13"

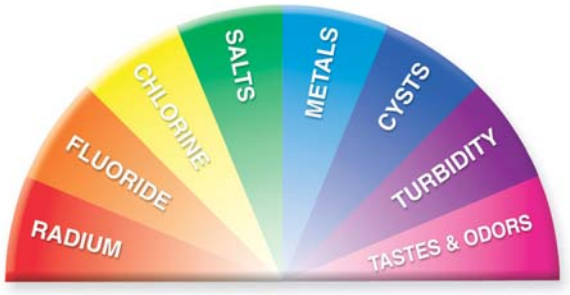
Part Number	Type	Use	Size	No. Per Case
WQCSC13	Sediment	Pre-filtration	13"	2
WQCCC13	Carbon block	Pre-filtration	13"	2
WQCGAC13	GAC	Post-filtration	13"	25
WQCM13-100	Membrane	Primary filtration	13"	25

Note: Elements listed above are replacements for residential and cooler models.

Residential RO systems in generic packaging

Every system is fully tested prior to shipment for leaks and function.

Removes the widest spectrum of drinking water contaminants for great tasting, more healthy drinking water.



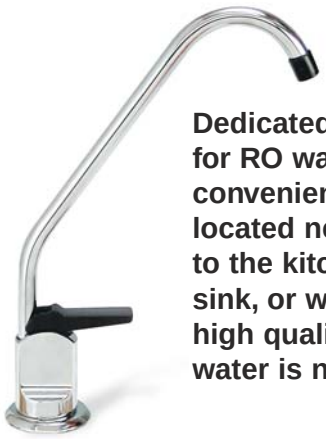
RO PRO® storage tank holds processed water until high quality water is needed.

Post filter to provide a final polish to remove tastes, odors and organic chemicals prior to water consumption or use.

Thin film composite membrane to typically reject 98% of the dissolved metals, salts and other harmful contaminants.

NSF component certified carbon block pre-filter, reduces chlorine to protect the reverse osmosis membrane.

NSF component certified pre-filter for sediment, removes rust, dirt and other solid particles.



Faucet meets lead free requirements.

Dedicated faucet for RO water, conveniently located next to the kitchen sink, or where high quality water is needed.

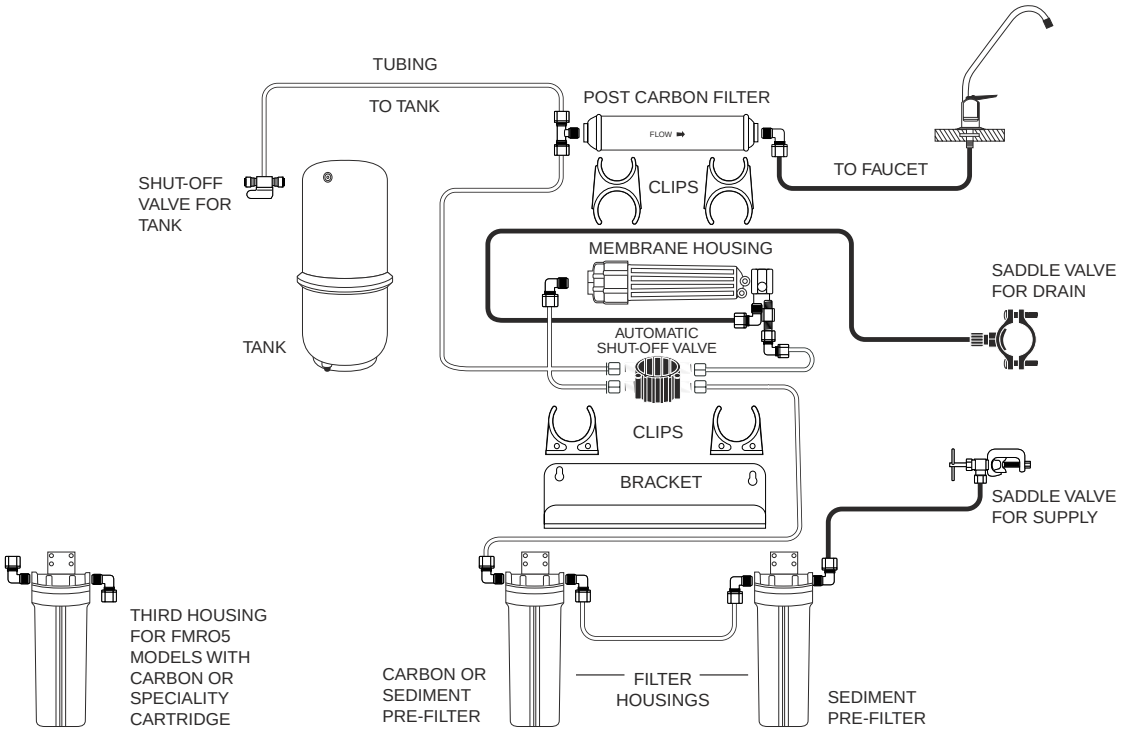
Models

Model Number	Stage	GPD	Fittings	Tubing to faucet	Shipping wt.
FMRO4J	4	50 GPD	Compression	1/4"	25
FMRO4G	4	50 GPD	John Guest	3/8"	25
FMRO5-MT*	5	50 GPD	Compression	3/8"	25
FMRO5J	5	50 GPD	Compression	1/4"	29
FMRO5G	5	50 GPD	John Guest	3/8"	29
FMRO5GP-115V	5	50 GPD	John Guest	3/8"	38
FMRO5GP-220V	5	50 GPD	John Guest	3/8"	38
FMRO4G-ERP	4	50 GPD	John Guest	1/4"	26
FMRO5-150G	5	150 GPD	John Guest	Fitted for 3/8" tubing	46

Note: FMRO5-150G unit only. (Unit comes with two 75 GPD membranes, 20" GAC, 20" carbon block, 20" spun cartridge and 3/8" fitting for tank supply tubing.) * With quick connect fittings on inlet and outlet.

Spare Parts for Residential RO Systems

For units packaged in generic cartons.



Part Number	RO Model Number	Description	No. Needed
FM4200WW14	All	Filter housing	2
FM-40AW	FMRO4J, FMRO4G	Bracket, dual pump	1
FM-60AW	FMRO4J, FMRO4G	Bracket, triple pump	1
EH-2501W	All	Membrane housing	1
ROPRO4-W	All	Storage tank, 4 gals.	1
WDF-103LA	All	Faucet, long-reach, lead-free	1
S-3000W	FMRO4J, FMRO5J	Automatic shut-off valve	1
S-3000HCW	FMRO4G, FMRO5G, FMRO5GP	Automatic shut-off valve	1
BV9014W	FMRO4J, FMRO5J	Drain Clamp	1
C256JF	FMRO4J, FMRO5J	Check valve assembly	1
FR-150-256JF	FMRO4J, FMRO5J	Flow restrictor assembly	1
40-4-2-N-O	FMRO4J, FMRO5J	Jaco® male elbow, 1/4” x 1/8”	1
40-4-4-N-O	FMRO4J, FMRO5J	Jaco® elbow, 1/4” x 1/4”	2
10-4-4-N-O	FMRO4J, FMRO5J	Jaco® male connector, 1/4” x 1/4” NPT	1
60-4-4-N-O	FMRO4J, FMRO5J	Jaco® tee	1
NP1415W	FMRO4J, FMRO5J	HEX NIPPLE, 1/4” x 1-1/2” NPT	1
CI480821W	FMRO4G, FMRO5G, FMRO5GP	John Guest® elbow, 1/4” x 1/8”	1
CI480822W	FMRO4G, FMRO5G, FMRO5GP	John Guest® elbow, 1/4” x 1/4”	3
CI010822W	FMRO4G, FMRO5G, FMRO5GP	John Guest® connector, 1/4” x 1/4” NPT	2
CI010821W	FMRO4G, FMRO5G, FMRO5GP	John Guest® connector, 1/4” x 1/8” NPT	4
CI0208W	FMRO4G, FMRO5G, FMRO5GP	John Guest® union tee	1
CI050822W	FMRO4G, FMRO5G, FMRO5GP	John Guest® stem adapter, 1/4” x 1/4”	1
CI31212U7S	FMRO4G, FMRO5G, FMRO5GP	John Guest® faucet connector	1
C220JG-ST	FMRO4G, FMRO5G, FMRO5GP	Check valve assembly	1
FR-125-220JG	FMRO4G, FMRO5G, FMRO5GP	Flow restrictor assembly	1
FPMB5-978	All	Pre-filter, sediment	1
MAXETW-975	All	Pre-filter, carbon	1
GAC-10N	FMRO4G, FMRO5G, FMRO5GP	Pre-filter, GAC	1
AICRO	All	Post-filter, carbon	1
TW30-1812-50	All	Membrane, 50 GPD capacity	1
INS14	FMRO4J, FMRO5J	Tube insert	14
MS1034	All	Mounting screw, #10 x 3/4”	10
MS0812	All	Mounting screw, #8 x 1/2	1

Fully Assembled ROs in Generic Packaging

FMRO5-MT System

Five stage system, comes complete with 50 GPD membrane, one sediment pre-filter, two carbon block pre-filters, GAC post filter, low-lead chrome faucet, metal storage tank, saddle valve, 1/4" tubing for feed water, 3/8" tubing from tank to faucet and quick connect fittings for inlet and outlet connections. Economical price!

Specifications:

Production	50 GPD
Membrane rejection	96% (typical)
Tank capacity	4 gallons
Temperature range	40°F - 100°F
Pressure (min. / max.)	30 - 100 psi

Primary advantages: 50 GPD capacity, top quality components and highly attractive pricing.

Four stage models

FMRO4J

Provides four stage treatment with 50 GPD membrane, sediment pre-filter, carbon block pre-filter, GAC post filter, RO PRO® plastic storage tank, low-lead chrome faucet, 1/4" tubing and compression fittings.

Primary advantages: 50 GPD output, high quality components, RO PRO® storage tank and economical cost.

FMRO4G

Provides four stage treatment with 50 GPD membrane, sediment pre-filter, carbon block pre-filter, GAC post filter, RO PRO® plastic storage tank, low-lead chrome faucet, 3/8" tubing from tank to faucet and genuine John Guest® , quick connect fittings.

Primary advantage: 50 GPD output, easy installation with quick connect fittings and RO PRO® storage tank.

Five stage models

FMRO5J

Provides five stage treatment with 50 GPD membrane, sediment pre-filter, carbon block pre-filter, GAC pre-filter, GAC post filter, RO PRO® plastic storage tank, low-lead chrome faucet, 1/4" tubing and compression fittings.

Primary advantages: Five stage treatment, RO PRO® storage tank and economical cost.

FMRO5G

Provides five stage treatment with 50 GPD membrane, sediment pre-filter, carbon block pre-filter, GAC pre-filter, GAC post filter, RO PRO® plastic storage tank, low-lead chrome faucet, 3/8" tubing from tank to faucet and genuine John Guest® quick connect fittings.

Primary advantages: Five stage treatment, easy installation with quick connect fittings and RO PRO® storage tank.

Models with Booster Pumps

FMRO5GP-115 / FMRO5GP-220

Ideal in low pressure situations and for higher water production. These systems work when other RO systems without pumps fail.

Provides five stage treatment with 50 GPD membrane, sediment pre-filter, carbon block pre-filter, GAC pre-filter, GAC post filter, RO PRO® plastic storage tank, low-lead chrome faucet, 3/8" tubing from tank to faucet and genuine John Guest® fittings.

Systems for 115 and 220 voltage come with top quality, genuine Aquatec® booster pumps.

FMRO4G-ERP (with non electric pump)

Systems come fully assembled and include a non-electrical Aquatec® permeate pump, which is designed to reduce back pressure and increase water making capacity.

Four stage FMRO4G-ERP systems include pre-filter for sediment; carbon block pre-filter and GAC pre-filter for odor, taste and chlorine reduction; 50 GPD membrane; low-lead chrome faucet; plastic RO PRO® storage tank; 1/4" tubing for feed water; 3/8" tubing for tank to faucet; saddle valves, and genuine John Guest® fittings.

FMRO5-150G

Booster pump purchased separately (if required).

Systems come with frame (suitable for wall mounting) three sumps; 20" pre-filter cartridge for sediment; two 20" carbon block cartridges for chlorine, taste and odor reduction; two 75 GPD membrane and membrane housings; automatic shut off valve and 3/8" fittings. Options are additional and they are application specific.

Options

Part number	Description
CDP-8800	Aquatec® booster pump (115v; 3/8" fittings)
TACS-114-48	Transformer for pump (2 amp)
See catalog	Pressure tank for storage (specify size)
SVBV-38	Saddle valve for 3/8" tubing for feed
SC500B38	Saddle valve for 3/8" tubing for drain
FMPE-38	Tubing, 3/8" (specify length and color)

Spare parts

W-1812-75	Watts® brand, 75 GPD membrane (req. 2)
FPMB5-20	Flow-Pro® melt blown cartridge (5 mic.)
MAXETW-20	C-MAX® carbon block cartridge (5 mic.)
AICRO	In-line GAC post filter

NSF® Certified Residential RO Systems

Innovative manifold models, conventional designs and zero waste systems.

Reverse osmosis...

Removes a wide range of drinking water contaminants.

Reverse osmosis drinking water systems include membrane separation, activated carbon adsorption and micro filtration to reduce a wide range of contaminants that can be found in drinking water, including Nitrate, Nitrite, Copper, Radium Lead, Arsenic, Fluoride, Giardia Cysts, Chromium, Cryptosporidium, tastes and odors.

Flowmatic® single-piece, manifold reverse osmosis systems

Enjoy five stage water treatment with our highly efficiency RO membrane systems, designed to reduce harmful contaminants; three pre-filters to reduce sediment and chlorine; a post filter for a final polishing after storage tank; and a dedicated faucet to dispense great tasting, more healthy drinking water.

Innovative, single-piece manifold design
Our single-piece manifold eliminates 17 hose connections, compared to conventional models, for greater water flow. With fewer connections, there's less chance problems will occur.

Easy installation!
Installations are easy, since the major components are an integral part of the single-piece manifold.

And membranes are easily replaced with our unique push / pull o-ring design.

Dedicated faucet for RO water.

Top quality, John Guest® fittings
Manifold hose connections are easy, safe and secure!

RO PRO® storage tank
Our "high profile" storage tanks take less space below sink. Polypropylene construction will not chip, dent or rust.

Optional metal tank
Manifold models are also available with metal storage tanks, so you may choose the tank option you prefer!

Post filter
For fifth stage treatment from tank to faucet.

NSF® certified
Our entire manifold system is NSF Standard 58 Certified.

Cool, dual wrench
Systems come with dual wrench to easily remove filter sumps and membrane housing.

Our new NSF certified, single-piece manifold systems beat the competition hands down!

CERTIFIED STANDARD 58

Here's why!

- Single-piece manifold eliminates many hose connections for greater water flow.
- With our innovative manifold design, leaks are virtually eliminated.
- Major components are in the manifold, so installation labor is dramatically reduced.
- Touch-Flo® faucets are lead-free for healthier drinking water.
- 3/8" tubing from tank to faucet for greater flow.
- Genuine John Guest® fittings for superior performance and easy installation.
- Entire systems are NSF certified (including Nitrate / Nitrite reduction).
- Systems are State of California DHS certified.
- Every system is factory tested for pressure, leaks, shut-off and TDS rejection.
- Greater consumer appeal. (Designed for consumers who demand the "best".)

Manifold models

Model Number	Type	Stage	GPD	Fittings	Tank	Faucet	Ship.Wt.
FMRO5-M-PT	Manifold	5	50	John Guest®	Plastic*	Touch-Flo®	21 lbs.
FMRO5-M-MT	Manifold	5	50	John Guest®	Metal	Touch-Flo®	21 lbs.
FMRO4-MAN	Manifold	4	50	John Guest®	Metal	Long Reach	21 lbs.

*High profile, RO PRO® storage tank will not chip, rust or dent. Rated for pressures to 100 psi. (RO PRO® tanks are only 9" in diameter.)

Microbiological Drinking Water Purifer

The patented, microbiological filter provides a physical barrier to prevent bacteria, virus and cysts from flowing through the filter in the presence of microbiological contamination. In addition, proprietary ingredients are added to the carbon block to increase removal efficiencies and provide additional protection from harmful water contaminants.

System tested and certified by NSF International against NSF/ANSI Standard 42. Please refer to PDS for specific performance claims.

System has been tested by BioVir as a Microbiological Water Purifier based on the recommendations set forth in the USEPA Guide Standard and Protocol for Microbiological Water Purifiers (OPP Task Force Report 1987)

The WATTS microbiological drinking water purifier offers dual-stage filtration to provide safe, great tasting drinking water for you and your family. The system is an excellent alternative to reverse osmosis technology because it's easy to install, easy to service and highly affordable.

Features & benefits

- Multi-stage treatment for safe drinking water:
  - #1 Five micron pre-filter to reduce sediment, dirt, rust particles, silt and suspended matter.
  - #2 Enhanced carbon block to reduce chlorine, taste and odors with patented, bacteriostatic fail-safe chemistry, to reduce bacteria, virus and cysts, without the use of membrane technology.
- Removes 99.9999% Bacteria
  99.99% Virus
  99.95% Protozoan Cyst
- Reduces chlorine, tastes and odors.
- NSF certified and independent lab tested.
- Model WP2-BVC includes the complete system for under counter installation, including designer, ***top mount*** faucet for safe drinking water.

Operating Temperature	Operating Pressure
Max. 100°F (38°C) Min. 40°F (4.4°C)	Max. 100 PSI (7 bar) Min. 20 PSI (1.4 bar)

Certified For: % Reduction

Bacteria	**99.9999%**
Virus	**99.99%**
Cysts	**99.95%**
Cryptosporidium	**99.95%**
Entamoeba	**99.95%**
Giardia	**99.95%**
Toxoplasma	**99.95%**

Removes:

- **Salmonella**
- **E-Coli**
- **Cholera**
- **Hepatitis A**
- **Norwalk**
- **Toxoplasma**
- **Virus (enteric)**
- **Legionella**
- **Giardia**
- **Cryptosporium**
- **Entamoeba**
- **And more!**

Replacement cartridges

Model #	Flow rate	Stages	Pre-filter	Purifier Cartridge	Housing O-ring
WP2-BVC	0.75 gpm	2	FPMB5-978	F101003	OR-4

System has been independently tested for the disinfection of microbiologically contaminated water. The system is not intended for the treatment of water that has an obvious contamination source, such as raw sewage. This system is not intended to convert wastewater to microbiologically safe drinking water.

Watts® Drinking Water Units with Kwik-Change™ Cartridges

NEW for 2007!

We now offer a complete line of filtration systems and components with Kwik-Change cartridges, including cartridges for taste, odors and chlorine reduction; sediment; hollow fiber membrane for ultra filtration; and cartridges with antibacterial activated carbon.

These systems and components are ideal for residential, food service and cooler applications.

Specifications

Type	Micron	Capacity* (gallons)		
		10"	11"	13"
Activated carbon	5	1,500	2,000	2,500
Sediment (melt blown PP)	5	900	1,000	1,100
Hollow fiber membrane	0.1 - 0.3	1,500	2,000	2,500
Antibacterial carbon	5	1,500	2,000	2,500

Note: All models listed above use 3/8" tubing from unit to tank to faucet. All models come with designer, top mount air gap faucets.

Product codes

Watts drinking water units with Kwik-Change™ cartridges

WQCFU-AC	10” single cartridge with bracket, activated carbon block	1
WQCFU-S	10” single cartridge with bracket, sediment	1
WQCFU-D	10” dual system with bracket, sediment & carbon block	1
WQCFU-T	10” triple system w/bracket, carbon, sediment, hollow fiber membrane (UF)	1

10” replacement elements

WQCSC10	10” Kwik-Change™ cartridge, 5 micron, sediment	32
WQCCC10	10” Kwik-Change™ cartridge, carbon block	32
WQCHFC10	10” Kwik-Change™ cartridge, hollow fiber	32
WQCABC10	10” Kwik-Change™ antibacterial carbon cartridge	32

11” replacement elements

WQCSC11	11” Kwik-Change™ cartridge, 5 micron, sediment	25
WQCCC11	11” Kwik-Change™ cartridge, carbon block	25
WQCHFC11	11” Kwik-Change™ cartridge, hollow fiber	25
WQCABC11	11” Kwik-Change™ antibacterial carbon cartridge	25

13” replacement elements

WQCSC13	13” Kwik-Change™ cartridge, 5 micron, sediment	25
WQCCC13	13” Kwik-Change™ cartridge, carbon block	25
WQCHFC13	13” Kwik-Change™ cartridge, hollow fiber	25
WQCABC13	13” Kwik-Change™ antibacterial carbon cartridge	25

Brackets for filter units

WQCFUB-S	Bracket for filter unit, single	100
WQCFUB-D	Bracket for filter unit, dual	50
WQCFUB-T	Bracket for filter unit, triple	50

Heads for filter units and ROs for coolers

WQC14-2	Head connector (2 port, 1/4” for pre and post filters)	100
WQC14-3	Head connector (3 port, 1/4” for membrane)	100

Under Counter Drinking Water Units

Fully assembled systems in "no name" generic packaging.

Model ADWU-S (single)

Model ADWU-D-UV
(Dual model with UV lamp and cartridges)

Model ADWU-DM (dual with meter)

Model ADWU-TM (triple with meter)

- Fully assembled for easy installation
- Packaged in white, "no name" retail cartons
- Installation instructions included
- Long reach faucets meet lead-free requirements
- Models with automatic shut off meter included for cartridge replacement
- Stainless steel mounting screws included
- Comes with genuine John Guest® quick connect fittings

Model Number	Type	Meter for Auto Shut-Off	Number Per Carton
ADWU-S	Single	No	1
ADWU-D	Dual	No	1
ADWU-DM	Dual	Yes	1
ADWU-D-UV	Dual with UV	No	1
ADWU-T	Triple	No	1
ADWU-TM	Triple	Yes	1

Note: ADWU-D-UV model includes UV lamp, ballast, sediment cartridge and carbon block cartridge. For other models, cartridges are not included. The recommended maximum flow rate for ADWU-D-UV system is 1 GPM.

Counter Top Filters

Conventional and models with built-in alarm for cartridge replacement indicator.

Hydro-Safe® model with built-in alarm

Conventional models

- Fully assembled
- Easy installation
- Long reach spouts
- Adapters and fittings included
- Packaged in white retail cartons
- Ideal for private label marketing
- Model with audible alarm for cartridge replacement indicator

Hydro-Safe® model with audible alarm to indicate when to replace the cartridge.

Model Number	Description	No. Per Case
HSCT-WM	Assembled system packaged in attractive retail carton with audible alarm.	6

Conventional models, packaged in white retail cartons

Model Number	Type	Housing	Spout	Inlet Fitting	Elbow	Diverter	No. Per Case
ACT-C	Chrome	SS-4000	LRS-C-OR	C-22N	C-21-1	SDV-14S	12
ACT-P	White	SS-4000	LRS-P	CI010822W	CI481222W	DV-800WM	12

Unassembled kits, packaged in bulk

Model Number	Type	Housing	Spout	Inlet Fitting	Elbow	Diverter	No. Per Case
CTK-C	Chrome	SS-4000	LRS-C-OR	C-22N	C-21-1	SDV-14S	12
CTK-P	White	SS-4000	LRS-P	CI010822W	CI481222W	DV-800WM	12

Note: Cartridges are not included.

Watts UV Disinfection Systems

Applications

- Wells
- Homes
- Water systems
- Aquaculture
- Food service
- Water coolers
- RO systems

Features & Benefits

- Disinfection without the use of dangerous or expensive chemicals.
- Effective disinfection for chlorine resistant bacteria, virus, and protozoan cysts.
- Lamps rated for 12 month continuous service life.
- Highly polished 304 stainless steel reactor chamber for durability.
- Audible and visual alarm standard on ballast indicating lamp failure.
- Easy lamp replacement service.
- Available in 110 v and 230v.
- 30mj/cm^2 dose at specified flow rate at the end of lamp life.
- Quartz sleeve and lamps.

Specifications

Chamber materials	304SS
Max. water temperature	104°F (40°C)
Min. water temperature	36°F (2°C)
Max pressure	125 psi
UV dose (end of life)	30 mj/cm^2
Lamp life	9,000 hrs
Lamps per chamber	Single

Water quality guidelines

Total Iron	less than 0.3 mg/l
Hydrogen sulfide	less than 0.05 mg/l
Turbidity	less than 10 mg/l
Manganese	less than 0.05 mg/l
Hardness	less than 7 grains
UV transmittance	greater than 90%

Note: Minimum water quality guidelines are recommended to ensure proper operation and continuous disinfection.

Models

Product code	Flow Rate (gpm)	Pipe Size	Dimensions (L x W x H)	Electrical	Shipping (Lbs.)
WUV2-110	2	1/2" MNPT	18” x 6” x 5-3/8”	110-130 v / 50-60 Hz	6
WUV2-230	2	1/2" MNPT	18” x 6” x 5-3/8”	200-250 v / 50-60 Hz	6
WUV6-110	6	3/4" MNPT	25-1/2” x 6” x 5-3/8”	110-130 v / 50-60 Hz	7
WUV6-230	6	3/4" MNPT	25-1/2” x 6” x 5-3/8”	200-250 v / 50-60 Hz	7
WUV8-110	8	3/4" MNPT	32” x 8-1/4” x 3-3/4”	110-130 v / 50-60 Hz	9
WUV8-230	8	3/4" MNPT	32” x 8-1/4” x 3-3/4”	200-250 v / 50-60 Hz	9
WUV12-110	12	1" MNPT	41-1/2” x 8-1/4” x 3-3/4”	110-130 v / 50-60 Hz	17
WUV12-230	12	1" MNPT	41-1/2” x 8-1/4” x 3-3/4”	200-250 v / 50-60 Hz	17

Hydro-Safe® UV Disinfection Systems

Top quality systems designed to reduce bacteria, virus & other harmful contaminants.

Applications

- Well water
- Surface water
- Municipal water
- Food service & processing
- Hospitals
- Aquaculture
- Electronics
- Pharmaceuticals
- Hotels
- Water bottlers
- Laboratories
- Marine

Features & Benefits

- Provides disinfection without the use of chemicals
- Reduces bacteria, virus and protozoa by 99.99%
- Electronic ballasts providing constant output current over the entire operating range
- Improved surge protection
- Annual lamp replacement reminder feature
- Polished, 304 stainless steel reactor chambers for durability
- Easy servicing (no need to disconnect water flow during lamp replacement)
- Open end quartz sleeves for optimum operating temperature and sealing efficiency
- Aluminum base for quick and easy servicing

Stainless steel models for flow rates to 24 GPM

Model No.	Flow Rate (GPM)	Dimensions			Pipe Size (MNPT)	Electrical	Ship Wt.
		Width	Height	Length			
HSUV-SS-05-1	0.5	2”	2”	11”	1/4”	110-130 v / 50-60 hz	5
HSUV-SS-05-2	0.5	2”	2”	11”	1/4”	200-250 v / 50-60 hz	5
HSUV-SS-1-1	1	2-1/2”	2-1/2”	15”	1/4”	110-130 v / 50-60 hz	5
HSUV-SS-1-2	1	2-1/2”	2-1/2”	15”	1/4”	200-250 v / 50-60 hz	5
HSUV-SS-2-1	2	2-1/2”	2-1/2”	17”	1/2”	110-130 v / 50-60 hz	6
HSUV-SS-2-2	2	2-1/2”	2-1/2”	17”	1/2”	200-250 v / 50-60 hz	6
HSUV-SS-5-1	5	2-1/2”	2-1/2”	21”	3/4”	110-130 v / 50-60 hz	7
HSUV-SS-5-2	5	2-1/2”	2-1/2”	21”	3/4”	200-250 v / 50-60 hz	7
HSUV-SS-8-1	8	2-1/2”	2-1/2”	35”	3/4”	110-130 v / 50-60 hz	10
HSUV-SS-8-2	8	2-1/2”	2-1/2”	35”	3/4”	200-250 v / 50-60 hz	10
HSUV-SS-12-1	12	7”	8”	37”	3/4”-1”*	110-130 v / 50-60 hz	18
HSUV-SS-12-2	12	7”	8”	37”	3/4”-1”*	200-250 v / 50-60 hz	18
HSUV-SS-24-1	24	7”	9-1/2”	37”	1”	110-130 v / 50-60 hz	23
HSUV-SS-24-2	24	7”	9-1/2”	37”	1”	200-250 v / 50-60 hz	23

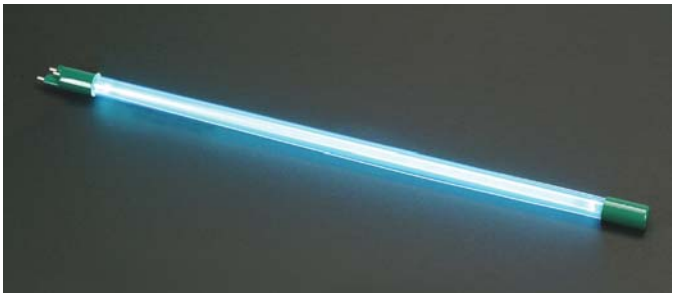
Systems are rated for pressures to 125 psi. *Combo fitting. External ballast and power cord are included.

Hydro-Safe® UV Disinfection Systems

Top quality systems designed to reduce bacteria, virus & other harmful contaminants.

Options for models with monitors

Part Number	Description	Size	Material	Electrical
HSMMSV-15-1	Solenoid valve for monitor models	1/2"	Brass	110
HSMMSV-15-2	Solenoid valve for monitor models	1/2"	Brass	220
HSMMSV-75-1	Solenoid valve for monitor models	3/4"	Brass	110
HSMMSV-75-2	Solenoid valve for monitor models	3/4"	Brass	220
HSMMSV-100-1	Solenoid valve for monitor models	1"	Brass	110
HSMMSV-100-2	Solenoid valve for monitor models	1"	Brass	220
HSMMSV-150-1	Solenoid valve for monitor models	1-1/2"	Brass	110
HSMMSV-150-2	Solenoid valve for monitor models	1-1/2"	Brass	220
HSMMSV-200-1	Solenoid valve for monitor models	2"	Brass	110
HSMMSV-200-2	Solenoid valve for monitor models	2"	Brass	220
HSMMC-1	Cable connects solenoid to monitor	5'		
HSMM-RM	Remote monitor shows intensity & time			
HSMM-FR-2	Flow restrictor set for 2 GPM	1/2" x 1/2" FNPT	Chrome	
HSMM-FR-5	Flow restrictor set for 5 GPM	3/4"x3/4" FNPT	Chrome	
HSMM-FR-8	Flow restrictor set for 8 GPM	3/4"x3/4" FNPT	Chrome	
HSMM-FR-12	Flow restrictor set for 12 GPM	1"x1" FNPT	Chrome	
HSMM-FR-20	Flow restrictor set for 20 GPM	1"x1" FNPT	Chrome	



Replacement lamps

Part Number	Flow Rate (GPM)	Length		Ship Wt. (Lbs.)
HSRL-9	0.5	9”	229 mm	1
HSRL-11	1	11-7/8”	302 mm	1
HSRL-13	2	13-1/2”	343 mm	1
HSRL-18	5	18-13/16”	479 mm	1
HSRL-32	8	32-1/2”	826 mm	1
HSRL-33	12 to 100	33-3/4”	857 mm	1
HSRL-61	225 to 800	61-7/8”	1,571 mm	1

Note: Two o-rings are shipped with all replacement lamps.

Quartz sleeves

Part Number	Flow Rate (GPM)	Size	Material	Ship Wt. (Lbs.)
HSQS-9	0.5	20x22.5x254 mm	Quartz	1
HSQS-11	1	20x22.5x330 mm	Quartz	1
HSQS-13	2	20x22.5x375 mm	Quartz	1
HSQS-18	5	20x22.5x502 mm	Quartz	1
HSQS-32	8	20x22.5x845 mm	Quartz	1
HSQS-33	12 to 100	20.5x22x889 mm	Quartz	1
HSQS-61	225 to 800	22x25x1638 mm	Quartz	1

Hydro-Safe® UV Disinfection Systems

Replacement ballast and power cords.

Revolutionary ballast design

Our revolutionary ballast design provides the following significant advantages:

- Longer lamp life due to cooler operation
- Improved transient protection from electrical spikes
- Eliminates lamp flickering
- Audible & visual alarm if lamp fails
- Audible & visual alarm for lamp replacement (12 mos.)
- Conformal coated circuit board for condensation protection.

Electronic ballast

Part Number	Model Numbers	Type	Electrical (Lbs.)	Ship Wt.
HSEB-1F	HSUV-SS-05-1 HSUV-SS-1-1 HSUV-SS-2-1 HSUV-SS-5-1 HSUV-SS-8-1 HSUV-SS-12-1	Electronic	100 - 130v / 50-60 hz	2
HSEB-2F	HSUV-SS-05-2 HSUV-SS-1-2 HSUV-SS-2-2 HSUV-SS-5-2 HSUV-SS-8-2 HSUV-SS-12-2	Electronic	200 - 250v / 50-60 hz	2
HSEB-3F	HSUV-SS-M-5 HSUV-SS-M-8 HSUV-SS-M-12 HSUV-SS-M-24	Electronic	100 - 130v / 50-60 hz	2
HSEB-40/100-100	HSUV-SS-40-1 HSUV-SS-65-1 HSUV-SS-100-1	Electronic	100 - 130v / 50-60 hz	1
HSEB-40/100-200	HSUV-SS-40-2 HSUV-SS-65-2 HSUV-SS-100-2	Electronic	200 - 250v / 50-60 hz	1
HSEB-225/800-100	HSUV-SS-225-1 HSUV-SS-400-1 HSUV-SS-600-1 HSUV-SS-800-1	Electronic	100 - 130v / 50-60 hz	2
HSEB-225/800-200	HSUV-SS-225-2 HSUV-SS-400-2 HSUV-SS-600-2 HSUV-SS-800-2	Electronic	200 - 250v / 50-60 hz	2

Note: Detachable power cords sold separately.

Detachable power cords

Part Number	Description	Type	Ship Wt. (Lbs.)
HSDPC-NA	North American (NEMA 5-15P)	3-prong grounded (115V)	1
HSDPC-EU	European	2-pin	1
HSDPC-UK	UK	3-prong	1
HSDPC-A	Australian	3-prong	1

Plastic UV Systems

Disposable models and units with replaceable lamps for economy.

Model PUV-6W-110 with replaceable lamp

Plastic UV systems with replacable lamps

Model Number	Description	Fitting	Flow Rate	Electrical	Number Per Case
PUV-6W-110	Complete unit*	1/4" J.G.	1 GPM	6 Watts, 110V, 60 Hz.	25

*Includes ballast

Spare parts

Part Number	Description	Electrical	Number Per Case
PUV-BAL110	Ballast	6 Watts, 110V, 60 Hz.	1
PUV-RL-6W	Lamp	6 Watts, 110V, 60 Hz.	1

Disposable in-line uv systems

Low cost uv systems for residential applications.

Advantages

- Low cost
- Easy installation
- Reliable
- Flow rates from 0.5 to 2.0 GPM

Disposable in-line uv systems

Model Number	Dimensions	Fittings	Flow Rate (GPM)	Electrical	Number Per Case
UV4	2" x 10"	1/4" J.G.	0.5	4 Watts	25
UV6	2-1/2" x 10"	1/4" J.G.	1.0	6 Watts	25
UV8	2-1/2" x 10"	1/4" J.G.	2.0	8 Watts	25
UV24*	2" x 10"	1/4" J.G.	0.5	4 Watts	25
UV26*	2-1/2" x 10"	1/4" J.G.	1.0	6 Watts	25
UV28*	2-1/2" x 10"	1/4" J.G.	2.0	8 Watts	25

Spare parts for disposable in-line uv systems

Part Number	Description	No. / Case
UVBAL120	Ballast (U.S.)	25
UV2BAL*	Ballast (International)	25

*For international electrical requirements.

Whole House Filters

Stainless steel and polypropylene filter housings for point-of-entry filtration.

Flow-Max®
Multi Cartridge Filter

Big-Bubba®
Non-Metallic Filter

Flow-Max®
Jumbo cartridge filter

Non-electric whole house filters

Model Number	Description	Cartridges per Housing	Max. Pressure (PSI)	Pipe Fittings	Shipping Weigh (Lbs.)
BBH-150	Model 150 Big-Bubba filter	1	125	2" Slip	47
FM4X1-1	Flow-Max four cartridge filter	4	150	1" MNPT	26
FMJCH40	Flow-Max jumbo cartridge filter	1	150	2" MNPT	31

Filter cartridge options for Big-Bubba BBH-150 whole house filter

Model Number	Description	Length	O.D.	Micron	Cartridges Per Housing
BBC-150-P5	Pleated cartridge for sediment	26"	6-3/8"	5	1
BBC-150-P20	Pleated cartridge for sediment	26"	6-3/8"	20	1
BBC-150-AC	Activated carbon cartridge	26"	6-3/8"	10	1

Filter cartridge options for Flow-Max FM4X1-1 multi-cartridge whole house filter

Model Number	Description	Length	O.D.	Micron	Cartridges Per Housing
FM-5-975	Pleated cartridge for sediment	9-3/4"	2-3/4"	5	4
FM-20-975	Pleated cartridge for sediment	9-3/4"	2-3/4"	20	4
MAXETW-975	Solid block activated carbon	9-3/4"	2-7/8"	5	4

Filter cartridge options for Flow-Max jumbo cartridge filters

Model Number	Description	Length	O.D.	Micron	Cartridges Per Housing
FMHC-40-5	Pleated cartridge for sediment	9-5/8"	7-3/4"	5	1
FMHC-40-20	Pleated cartridge for sediment	9-5/8"	7-3/4"	20	1

Note: Filter cartridges rated for temperatures to 140°C. Filter housings do not include filter cartridges.

Water Testing Equipment

Hand held testers, combination kits and test strips for well and municipal water.

Test kits for every application

Arsenic test kit

Hand held testers

Part Number	Test For	Description	Range	No. Per Carton
PH600	pH	Portable, battery	229 MM	1
WTDS-3	TDS	TDS meter with temperature	302 MM	1
DPG	Pressure	Digital pressure meter	342 MM	1

Combination kits

Part Number	Test For	Description	Range	No. Per Carton
FM480113	4-IN-I city check	pH, total alkalinity, total chlorine & hardness	25	1
FM480115	5-IN-1 water works	pH, total alk., total hardness, free & total Cl	30	1
FM481345	5-IN-1 economy	Nitrate, Nitrate, total alk., pH, total hardness	25	1
HA95A	Hardness & Iron	Powder, tablet, solution for hardness & iron		

Hand held testers

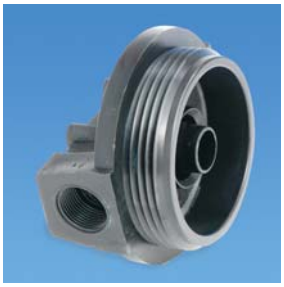
Part Number	Test For	Description	Tests
FM481396	Arsenic (quick)	0, 5, 10, 20, 30, 40, 50, 60, 80, 100, 200,-500PPB*	100
FM481297	Arsenic (low range)	3, 6, 8, 10, 12, 15, 19, 24, 30, 40, 50, 60, 70, 80PPB*	50
FM481026	Chlorine (free)	0, 0.05, 0.2, 0.4, 0.6, 0.8, 1, 1.2, 1.5, 2, 2.6, 4, 6, 10PPM	50
FM480024	Chlorine HR (free)	0, 25, 50, 100, 200, 300, 400, 500, 750PPM	50
FM480010	Chlorine (total)	0, 0.05, 0.1, 0.15, 0.2, 0.5, 0.5, 1.0, 4.0,10PPPM	50
FM480008	Hardness (total)	0, 40, 80, 120, 180, 250, 425, 1000, grains/gallons; and0, 2, 5, 6, 7, 11, 15, 25, 58 grains/gallons	50
FM480025	Iron (FE+2/FE+3)	0, 0.02, 0.05, 0.1, 1, 0.3, 0.5, 0.75PPM	25
FM480009	Nitrate / Nitrite, Nitrogen	(NO_3: 0, 0.5, 2, 5, 10, 20, 50) (NO_2: 0.15, 0.3, 1, 3, 10)	50
FM480114	Ozone	0, 0.5, 0.1, 0.2, 0.3, 0.4, >0.5PPM (30 seconds)	30

Notes: HR = high range; LR = low range. *12 minute test. The MCL for Arsenic in the United States is 10 PPB.

Plastic Filter Housings, Counter Top Filters and Accessories

Flowmatic® Plastic Filter Housings

Top quality and economically priced plastic filter housings in generic packaging.

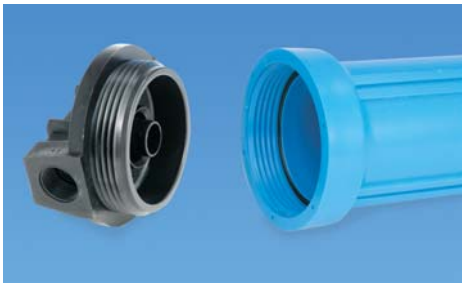


Buttress thread design

Provides superior sealing and greater security.

Heavy Duty Construction

Housings are made entirely of the highest quality FDA grade NSF listed polypropylene.



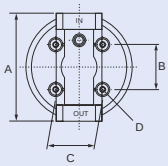
Features & benefits

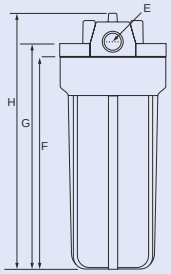
- Full product line for more types, models, pipe fittings and options than anyone in the business!
- Heavy duty construction, made using high quality FDA grade polypropylene.
- Superior chemical resistance from many aggressive chemicals.
- Buttress thread design for superior sealing and security.
- Thick side walls with heavy-duty ribs to provide greater strength.
- Temperature rated to 125°F (52°C).
- Pressure rated to 125 psi (8.75 bar).
- Cap, sump and top-seated o-rings compress to provide leak proof sealing.
- NSF Standard 42 certified (FH4200WW14, FH4200BB14, FH4200WW34).

NSF®

ANSI / NSF 42
CERTIFIED
FH4200WW14
FH4200WW34
FH4200BB14

Dimensions





Model	Size	A	B	C	D	E	F	G	H
500 Series	5”	4.28”	1.57”	1.18”	0.16”	X	5.7”	7.0”	7.5”
4000 Series	10”	4.72”	1.57”	1.18”	1.18”	X	10.5”	11.0”	11.8”
4200 Series	10”	4.72”	1.57”	1.18”	1.18”	X	10.5”	11.0”	11.8”
7000 Series	20”	4.72”	1.57”	1.18”	1.18”	X	20.47”	21.26”	22.8”
4500 Series	10”	5.35”	2.22”	2.28”	0.23”	X	10.43”	11.49”	12.5”
8000 Series	20”	5.35”	2.22”	2.28”	0.23”	X	20.47”	21.26”	22.8”
Full-Flow (B-B)	10”	7.28”	3.03”	3.03”	0.275”	X	11.33”	11.57”	14.0”
Full-Flow (B-B)	20”	7.28”	3.03”	3.03”	0.275”	X	21.25”	21.65”	24.0”

x = Depends on size of pipe fitting selected

Flowmatic® Types & Models

Residential Series
4200 (10") & 7000 (20")

Commercial Series
4500 (10") & 8000 (20")

Full-Flow (B-B) Series
5000 (10") & 10000 (20")

Valve-In-Head
Opaque & Clear

High Temp
4500HT (10") & 8000HT (20")

Virgin Polypro
DOE & "222"

White

Black

Blue / Black

Clear

Specifications

Material, sumps & caps	FDA grade polypropylene.
Material, o-rings	EPDM is standard; Viton is available as a spare part.
Maximum operating pressure	125°F (52°C)
Maximum temperature, standard	125 psi (8.75 bar)
Minimum temperature	40°F (4°C)
Maximum temperature, high temp	200°F (93°C)
Cycles test	Tested to 150,000 cycles from 0 to 125 psi.
Burst test	Tested to 500 psi.

Flowmatic® Plastic Filter Housings

5" clear and opaque housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH500WW14	5"	No	White	White	1/4"	12	18	19x14x8
FH500WW12	5"	No	White	White	1/2"	12	18	19x14x8
FH500CW14	5"	No	Clear	White	1/4"	12	19	19x14x8
FH500CW12	5"	No	Clear	White	1/2"	12	19	19x14x8

Clear housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
10" Residential								
FH4200CW14	10"	No	Clear	White	1/4"	12	31	19x14x13
FH4200CW14PR	10"	Yes	Clear	White	1/4"	12	31	19x14x13
FH4200CW38	10"	No	Clear	White	3/8"	12	31	19x14x13
FH4200CW38PR	10"	Yes	Clear	White	3/8"	12	31	19x13x14
FH4200CW12	10"	No	Clear	White	1/2"	12	31	19x14x13
FH4200CW12PR	10"	Yes	Clear	White	1/2"	12	31	19x14x13
FH4200CW34	10"	No	Clear	White	3/4"	12	31	19x14x13
FH4200CW34PR	10"	Yes	Clear	White	3/4"	12	31	19x13x14
10" Commercial clear								
HD4500CB34	10"	No	Clear	Black	3/4"	12	38	22x17x13
HD4500CB34PR	10"	Yes	Clear	Black	3/4"	12	38	22x17x13
20" Commercial clear								
FH8000CB34PR	20"	Yes	Clear	Black	3/4"	6	33	18x12x24
10" Full-Flow (BB) clear								
FH5000CB1PR	10"	Yes	Clear	Black	1"	4	34	16x16x14

Valve-In-Head housings (Three function valve with flow, shut-off & by-pass.)

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
VIH34APC-NP-SS	10"	No	Clear	White	3/4"	12	37	20x17x14

High-Temp housings (rated for temperatures to 200˚F (93˚C).

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
HD4500HT34	10"	No	Red	Red	3/4"	12	50	22x17x13
FH8000HT34	20"	No	Red	Red	3/4"	12	44	18x12x24

Natural polypropylene housings (ideal for high purity water)

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH4200NP34	10"	No	NP	NP	3/4"	12	24	19x14x13
FH8000NP34	20"	No	NP	NP	3/4"	6	29	18x12x24
FH8000NP34-222	20"	No	NP	NP	3/4"	6	29	18x12x24

Flowmatic® Plastic Filter Housings

All white housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH4200WW14	10"	No	White	White	1/4"	12	24	19x14x13
FH4200WW38	10"	No	White	White	3/8"	12	24	19x14x13
FH4200WW12	10"	No	White	White	1/2"	12	24	19x14x13
FH4200WW12PR	10"	Yes	White	White	1/2"	12	24	19x14x13
FH4200WW34	10"	No	White	White	3/4"	12	24	19x14x13
FH7000WW38	20"	No	White	White	3/8"	6	26	17x12x24
FH7000WW38PR	20"	Yes	White	White	3/8"	6	26	17x12x24
FH8000WW34PR	20"	Yes	White	White	3/4"	6	33	18x12x24
FH5000WW1PR	10BB	Yes	White	White	1"	4	22	16x16x14
FH5000WW15PR	10BB	Yes	White	White	1-1/2"	4	22	16x16x14
FH10000WW1PR	20BB	Yes	White	White	1"	4	35	16x16x26
FH10000WW15PR	20BB	Yes	White	White	1-1/2"	4	35	16x16x26

All black housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH4200BB14	10"	No	Black	Black	1/4"	12	24	19x14x13
FH4200BB34	10"	No	Black	Black	3/4"	12	24	19x14x13
HD4500BB34PR	10"	Yes	Black	Black	3/4"	12	38	22x17x13
FH8000BB34PR	20"	Yes	Black	Black	3/4"	6	33	18x12x24
FH5000BB1PR	10BB	Yes	Black	Black	1"	4	22	16x16x14
FH10000BB1PR	20BB	Yes	Black	Black	1"	4	35	16x16x26

10" Residential Blue / Black housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH4200BL14	10"	No	Blue	Black	1/4"	12	24	19x14x13
FH4200BL14PR	10"	Yes	Blue	Black	1/4"	12	24	19x14x13
FH4200BL38	10"	No	Blue	Black	3/8"	12	24	19x14x13
FH4200BL38PR	10"	Yes	Blue	Black	3/8"	12	24	19x13x13
FH4200BL12	10"	No	Blue	Black	1/2"	12	24	19x14x13
FH4200BL12PR	10"	Yes	Blue	Black	1/2"	12	24	19x14x13
FH4200BL34	10"	No	Blue	Black	3/4"	12	24	19x14x13
FH4200BL34PR	10"	Yes	Blue	Black	3/4"	12	24	19x13x13

20" Residential Blue / Black housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH7000BL38	20"	No	Blue	Black	3/8"	6	26	17x12x24
FH7000BL12	20"	No	Blue	Black	1/2"	6	26	17x12x24
FH7000BL12PR	20"	Yes	Blue	Black	1/2"	6	26	17x12x24

10" Commercial Blue / Black housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
HD4500BL34	10"	No	Blue	Black	3/4"	12	38	22x17x13
HD4500BL34PR	10"	Yes	Blue	Black	3/4"	12	38	22x17x13

Flowmatic® Plastic Filter Housings

20" Commercial Blue / Black housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH8000BL34	20"	No	Blue	Black	3/4"	6	33	18x12x24
FH8000BL34PR	20"	Yes	Blue	Black	3/4"	6	33	18x12x24

10" Full-Flow (B-B) housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH5000BL34PR	10"	Yes	Blue	Black	3/4"	4	22	16x16x14
FH5000BL1	10"	No	Blue	Black	1"	4	22	16x16x14
FH5000BL1PR	10"	Yes	Blue	Black	1"	4	22	16x16x14
FH5000BB1PR	10"	Yes	Black	Black	1"	4	22	16x16x14
FH5000BL15	10"	No	Blue	Black	1-1/2"	4	22	16x16x14
FH5000BL15PR	10"	Yes	Blue	Black	1-1/2"	4	22	16x16x14
FH5000WW1PR	10"	Yes	White	White	1"	4	22	16x16x14
FH5000WW15PR	10"	Yes	White	White	1-1/2"	4	22	16x16x14
FH5000CB1PR	10"	Yes	Clear	Black	1"	4	34	16x16x14

20" Full-Flow (B-B) housings

Model Number	Size	PR	Sump	Cap	Pipe Size	No./ case	Shipping Wt. (Lbs.)	Carton Size (")
FH10000BL34PR	20"	Yes	Blue	Black	3/4"	4	35	16x16x26
FH10000BL1	20"	No	Blue	Black	1"	4	35	16x16x26
FH10000BL1PR	20"	Yes	Blue	Black	1"	4	35	16x16x26
FH10000BB15PR	20"	Yes	Black	Black	1-1/2"	4	35	16x16x26
FH10000BL15	20"	No	Blue	Black	1-1/2"	4	35	16x16x26
FH10000BL15PR	20"	Yes	Blue	Black	1-1/2"	4	35	16x16x26
FH10000WW1PR	20"	Yes	White	White	1"	4	35	16x16x26
FH10000WW15PR	20"	Yes	White	White	1-1/2"	4	35	16x16x26

Wrenches

Part Number	For Housing Series	Material	Color	No. Per Package
WR100	500, 4000, 4200, 7000, V-I-H	Polypropylene	White	100
WR200	4500 & 8000	Polypropylene	White	100
WR500	5000 & 10000	Polypropylene	Black	90

O-Rings

Part Number	For Housing Series	Material	No. Per Package
OR1W	SS-1000	EPDM	10
OR4	500, 4000, 4200, 7000	EPDM	10
OR4V	500, 4000, 4200, 7000	Viton	10
OR5	5000 & 10000	EPDM	10
OR5V	5000 & 10000	Viton	10
OR8	4500 & 8000	EPDM	10
OR8V	4500 & 8000	Viton	10

Caps

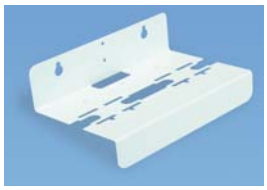
Part Number	For Housing Series	Pipe Size	Cap	PR	No./ Pk
FH4000CAPW14	500, 4000, 4200	1/4"	White	No	48
FH8000CAPB34PR	4500 & 8000	3/4"	Black	Yes	12
FH5000CAPB1PR	5000 & 10000	1"	Black	Yes	12
FH5000CAPW1PR	5000 & 10000	1"	White	Yes	12

Mounting brackets

FM-10 & FM10W
(For 500, 4200 & 7000)

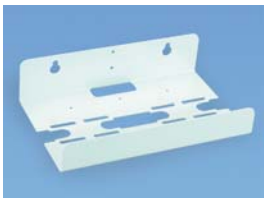
FM-20
(For 4500 & 8000)

FM25A
(For 5000 & 10000)



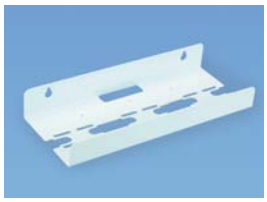
FM-30
(500, 4000, 4200, 7000)

FM-35
(For 5000 & 10000)



FM-40
(For 500, 4200, 7000)

FM-50
(For 500, 4200, 7000)



FM-60
(For 500, 4200, 7000)

Brackets

Part Number	Housing Series	Number	Type	Material	No. Per Pkg.
FM10*	500, 4000, 4200, 7000	Single	Steel	Zinc plated	150
FM15	Valve-In-Head	Single	Steel	Zinc Plated	10
FM20	4500, 8000	Single	Steel	White	100
FM30	500, 4000, 4200, 7000	Double	Steel	White	30
FM40	500, 4000, 4200, 7000	Double	Steel	White	24
FM50	500, 4000, 4200, 7000	Triple	Steel	White	25
FM60	500, 4000, 4200, 7000	Triple	Steel	White	25
FM-10AW	500, 4000, 4200, 7000	Single	Aluminum	White	150
FM-20AW	4200, 4500, 8000	Single	Aluminum	White	100
FM-25A	5000, 10000	Single	Aluminum	White	25
FM-25W	5000, 10000	Single	Steel	White	10
FM-30AW	500, 4000, 4200, 7000	Double	Aluminum	White	24
FM-40AW	500, 4000, 4200, 7000	Double	Aluminum	White	24
FM-35	5000, 10000	Double	Steel	White	5
FM-50AW	500, 4000, 4200, 7000	Triple	Aluminum	White	25
FM-50AB	500, 4000, 4200, 7000	Triple	Aluminum	Black	25
FM-60AW	500, 4000, 4200, 7000	Triple	Aluminum	White	25
FM-45	5000, 10000	Triple	Steel	White	5
FM-80AW	500, 4000, 4200, 7000	Quadruple	Aluminum	White	10
FM-99AW	500, 4000, 4200, 7000	Triple w/pump bkt.	Aluminum	White	20
FM-100SS	4500, 8000	Double	Stainless	Stainless	25

*Mounting screws are included.

Bracket dimensions

Bracket	Dimensions
FM10 & FM-10W	3-1/2" x 1-5/16" x 2-1/8"
FM20	4-1/2" x 2-1/4" x 3"
FM25	7" x 5-1/2" x 4-1/2"
FM30	2-1/4" x 5-3/4" x 9-1/4" x 1-1/2"
FM40	2-1/4" x 5-3/4" x 9-1/4" x 1-1/2"
FM50	2-1/4" x 5-3/4" x 14-1/8" x 1-1/2"
FM60	2-1/4" x 5-3/4" x 14-1/8" x 1-1/2"

Mounting screws

Part Number	Housing Series	Number	Length	Material	No. Per Pkg.
MS1012	SS-1000	#10	1/2"	SS	100
MS1034	4000, 4200	#10	3/4"	SS	100
MS1010	4000, 4200 with clip	#10	1"	SS	100
MS1410	4500 & 8000	#14	1"	SS	100
MS0812	For mounting clip	#8	1/2"	SS	100
MS5161	5000 & 10000	5/16	1"	SS	100

Individually Boxed Plastic Housings

Complete with filter, housing wrench, bracket and mounting screws.

Individually boxed filter housings

We are happy to announce a number of our filter housings are now available, individually boxed and come complete with housing, wrench, bracket and mounting screws. Housings are master packaged; however, the individual boxes are sturdy enough to ship separately in the individual carton.

Individually boxed plastic housings in master cartons

Model Number	Housing	Type	Sump	Cap	Wrench	Bracket	Number Per Ctn.
FH4200BL34PR-IB	FH4200BL34PR	Residential	Blue	Black	WR100	FM10	6
HD4500BL34PR-IB	HD4500BL34PR	Commercial	Blue	Black	WR200	FM20	6
HD4500CB34PR-IB	HD4500CB34PR	Commercial	Clear	Black	WR200	FM20	6
VIH34APC-SS-IB*	VIH34APC	Valve-In-Head	Clear	White	WR-APC	FM-15	6
FH5000BL1PR-IB	FH5000BL1PR	Full-Flow (B-B)	Blue	Black	WR500	FM25	4
FH10000BL1PR-IB	FH10000BL1PR	Full-Flow (B-B)	Blue	Black	WR500	FM25	4

*With stainless steel inserts.

SS-4000

SS-1000

CT-4000

APO-CTW

Flowmatic® counter top housings

Part Number	Size	Pipe Size	Sump	Cap	Carton Size	Ship Weight	No./ Case
APCCTW	10”	1/4”	Clear	White	19x14x13	31	12
APOCTW	10”	1/4”	White	White	19x14x13	26	12
CT4000WW14	10”	1/4”	White	White	19x14x13	26	12
SS1000CTPW*	10”	1/4”	White	White	19x14x13	10	12
SS4000VWW	10”	1/4”	White	White	19x14x13	26	12

*Accepts 1/4" candle mount cartridge. All housings have molded threads.

Counter top acessories

Part Number	Description	No. Per Case
WR100	(Housing wrench) CT-4000, APO-CTW, APC-CTW	100
WR400	(Housing wrench) SS4000	100
OR-4	(Spare o-ring) CT-4000, APO-CTW, CT500	100
OR-4W	(Spare o-ring) SS4000 in EPDM	100
OR-1W	(Spare o-ring) SS1000 in EPDM	100

Counter top spouts

Part Number	Description	No. Per Case
LRS-C-OR	L.R.S chrome, double o-rings	100
LRS-P-OR	L.R.S plastic, double o-rings	100
TS-800C-OR	Std. 8” chrome, double o-ring	100
TS-800P	Std. 8” plastic, no o-ring	100
PTS-800W	Std. 8” plastic, double o-rings	100

Diverter valves

Part Number	Description	No. Per Case
DV-14	Spring loaded, chrome, 1/4” single	200
DV-14S	Spring loaded, chrome, 1/4” single, swivel	200
SDV-14S	Manual slide, chrome, 1/4” single, swivel	200
SDV-14CQ	Manual slide, chrome, 1/4” fast connect	200
DVB-14C	Manual handle, 1/4” single, chrome	100
DVB-38C	Manual handle, 3/8” single, chrome	100
DV-14CDB	Spring loaded, 1/4” double, chrome	200
DV800W	Plastic, 1/4” single, white	500
DV800WM	Plastic, 1/4” single, metal collar	500
DV803WM	1/4” double, white, metal collar	500
DV806WM	1/2” double, white	500

Diverter valve adapters

Part Number	Description	No. Per Case
AD1P/AD2P	Plastic, male 13/16”, 15/16” X 27	500
AD1C/AD2C	Chrome, male 13/16”, 15/16” X 27	500
ETA	External faucet for all diverters	100
ETA-C	External faucet, chrome / brass	100

Counter top fittings

Part Number	Description	No. Per Case
C-21-1	Chrome elbow for spouts w/o o-rings	100
C-22N	Chrome elbow, barbed inlet,1/4” barb	100
EB-14W	Plastic elbow, barbed inlet,1/4” barb	100
EB-14LW	Plastic elbow for spouts w/o o-rings	100
CI010822W	Inlet fitting for 1/4”quick connect	100
CI481222W	Elbow for spouts w/o o-rings	100

Tubing for counter top filters (white vinyl)

Part Number	Size (O.D.)	Length	Color	No. Per Case
TL300	1/4"	3' Cut	White	1000
TL300-5	1/4"	500' Roll	White	1
TL300-10	1/4"	1000' Roll	White	1
TL600-5	1/4"	500' Twin Roll	White	1
TL375-5	3/8"	500' Roll	White	1

Counter top boxes & accessories

Part Number	Description	No. Per Case
CTN110W	SS-1000 Counter top kit, white gloss carton	10
CTN120C	Standard counter kit, four color retail carton (blue)	200
CTN120W	Standard counter top kit, white gloss carton	200
CTS500	Counter top stand, white	150

Strainers

Part Number	Description	Fitting	No. Per Case
KF3350M	In-line stainless steel strainer with screen	1/4" MNPT	180

NEW! Watts® Brand Plastic Filter Housings

Top quality, heavy-duty construction

Residential (Flat top)

Residential (Standard top)

Commercial Housing

Full-Flow (B-B)

Features

- Highly competitive prices
- Top quality, heavy-duty construction
- Performance validated by testing facility
- Wide range of models, colors, pipe fittings
- Watts labels on shipping carton only
- No product labels on individual housings
- Full line of brackets and wrenches
- Stocked for immediate shipment

Specifications

Materials (sumps & caps)	Polypropylene
Materials (o-ring)	EPDM
Max. temp standard housing	125°F (52°C)
Min. temp	40°F (4.4°C)
Max psi, res & com housings	125 psi (8.75 bar)
Max pressure, Full-Flow	90 psi (6.3 bar)
Cycle tests (@125 psi)	150,000 cycles
Threads	Straight

Watts brand plastic housing

10” residential housings (flat caps)

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W10RPH14WW	10”	No	White	White	1/4"	15	30
W10RPH38WW	10”	No	White	White	3/8"	15	30
W10RPH12WW	10”	No	White	White	1/2"	15	30
W10RPH12CW	10”	No	Clear	White	1/2"	15	30

10” residential housings (standard caps)

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W10RPH14WWSC	10”	No	White	White	1/4"	15	30
W10RPH38WWSC	10”	No	White	White	3/8”	15	30

10” commercial housings

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W10CPH34BLPR	10”	Yes	Blue	Black	3/4"	12	38
W10CPH12CBPR	10”	Yes	Clear	Black	1/2"	12	38
W10CPH34CBPR	10”	Yes	Clear	Black	3/4"	12	38

Watts® Plastic Filter Housings

20” commercial housings

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W20CPH34BLPR	20”	Yes	Blue	Black	3/4"	12	38

10” Full-Flow housings (for 9-3/4” x 4-1/2” cartridges)

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W10FFPH34BLPR	10 BB	Yes	Blue	Black	3/4"	6	33
W10FFPH1BLPR	10 BB	Yes	Blue	Black	1”	6	33
W10FFPH15BLPR	10 BB	Yes	Blue	Black	1-1/2”	6	33
W10FFPH1WLPR	10 BB	Yes	White	Black	1”	6	33
W10FFPH1CBPR	10 BB	Yes	Clear	Black	1”	6	33

20” Full-Flow housings (for 20” x 4-1/2” cartridges)

Model Number	Size	Pressure Relief	Sump	Cap	Pipe Size	No. / Case	Shipping wt. (lbs.)
W20FFPH34BLPR	20 BB	Yes	Blue	Black	3/4”	6	52
W20FFPH1BLPR	20 BB	Yes	Blue	Black	1”	6	52
W20FFPH15BLPR	20 BB	Yes	Blue	Black	1-1/2”	6	52
W20FF1PHWLPR	20 BB	Yes	White	Black	1”	6	52
W20FFPH1CBPR	20 BB	Yes	Clear	Black	1”	6	52

Heavy duty mounting brackets

Model Number	Housing Series	Type	Material	Color
WBKT-RCS	Residential & commercial housings	Single	Steel	White
WBKT-RCS-SS	Residential & commercial housings	Single	Steel	Stainless
WBKT-RD	Residential housings	Double	Steel	White
WBKT-RT	Residential housings	Triple	Steel	White
WBKT-CD	Commercial housings	Double	Steel	White
WBKT-CT	Commercial housings	Triple	Steel	White
WBKT-FF-1	Full-Flow housings	Single	Steel	White
WBKT-FF-2	Full-Flow housings	Double	Steel	White
WBKT-FF-3	Full-Flow housings	Triple	Steel	White

Note: Brackets for Watts housings will work with Flowmatic housings.

Wrenches for Watts brand plastic housings

Model Number	Housing Series	Material	Color
WW-R	Watts residential housings	Polypropylene	White
WW-C	Watts commercial housings	Polypropylene	White
WW-FF	Watts Full-Flow housings	Polypropylene	White

O-rings for Watts brand plastic housings

Model Number	Housing Series	Material
WOR-R	Watts residential housings	EPDM
WOR-C	Watts commercial housings	EPDM
WOR-FF	Watts Full-Flow housings	EPDM

Section 6

Filter Cartridges

C-MAX® Extruded Carbon Filter Cartridges

Full line of solid block activated carbon cartridges for water treatment.

Standard cartridges

Full-Flow(B-B)

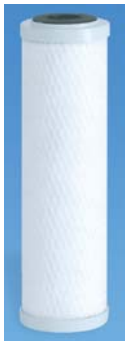
Full product line with color coded end caps to indicate cartridge type

MAX-ETW

MAX-S

MAX-CYST

MAX-VOC



MAX-T

MAX-PB

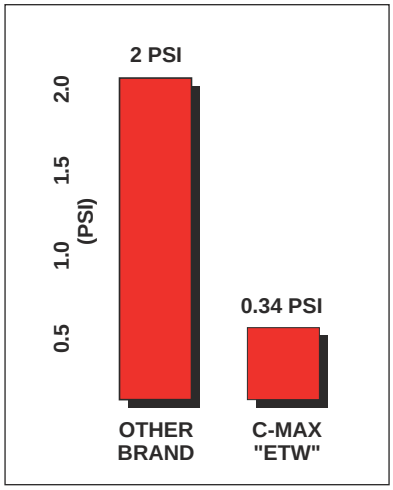
MAX-CL

Cartridge selection guide

Cartridge type	Wall	Carbon Type	Micron	Particle Size	Very High Sediment Removal	Very High Chlorine Reduction	Cysts	VOCs	Lead
MAX-ETW	Thick	Bituminous	5	Medium					
MAX-S	Thick	Coconut shell	5	Medium	●				
MAX-CYST	Thick	Bituminous	0.5	Fine			●		
MAX-VOC	Thick	Coconut shell	0.5	Fine			●	●	
MAX-T	Thick	Coconut shell	5	Medium					
MAX-PB	Thick	Coconut shell	0.5	Fine			●		
MAX-CL	Thick	Bituminous	0.5	Fine		●			

C-MAX® carbon block cartridges are tested and certified by NSF International under NSF / ANSI Standard 42 for materials only. Performance claims are supported by company test results.

Note: C-MAX cartridges are rated for temperatures to 165˚F (74˚C).



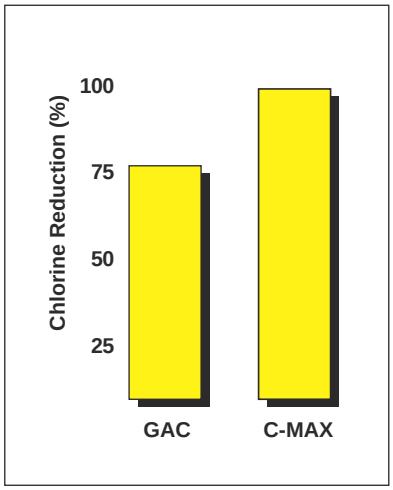
Low Pressure Drop

The chart above compares the pressure drop of MAXETW cartridges to another well known brand. This data demonstrates flow restrictions are dramatically reduced using MAXETW cartridges and not all carbon block cartridges perform the same.

MAX
CARBON FILTERS FOR MAXIMUM WATER QUALITY IMPROVEMENT

C-MAX®

Your best choice when both price and performance are required!



High Chlorine Reduction

Chlorine reduction with MAXETW carbon block cartridges is dramatically greater than other cartridge types, including granular activated carbon cartridges. The above data is typical for GAC and C-MAX cartridges during their usable life.

MAX-ETW, Economical, thick wall carbon block cartridges for Chlorine taste and odor

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXETW-975	Thick Wall	2-7/8"	9-3/4"	5 nominal	3,000 gallons	12
MAXETW-20	Thick Wall	2-7/8"	20"	5 nominal	6,000 gallons	6
MAXETW-30	Thick Wall	2-7/8"	30"	5 nominal	9,000 gallons	6
MAXETW-40	Thick Wall	2-7/8"	40"	5 nominal	12,000 gallons	6
MAXETW-FF975	Thick Wall	4-5/8"	9-3/4"	5 nominal	11,000 gallons	4
MAXETW-FF20	Thick Wall	4-5/8"	20"	5 nominal	20,000 gallons	6

MAX-S, Thick wall coconut shell carbon block cartridges for high dirt holding capacity

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXS-975	Thick Wall	2-7/8"	9-3/4"	5 nominal	6,000 gallons	12
MAXS-20	Thick Wall	2-7/8"	20"	5 nominal	12,000 gallons	6
MAXS-FF975	Thick Wall	4-5/8"	9-3/4"	5 nominal	22,000 gallons	4
MAXS-FF20	Thick Wall	4-5/8"	20"	5 nominal	40,000 gallons	6

MAX-CYST, Thick wall carbon block cartridges for fine particles, cyst reduction & extended Chlorine taste & odor reduction

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXCYST-975	Long life + cysts	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXCYST-20	Long life + cysts	2-7/8"	20"	0.5 nominal	45,000 gallons	6
MAXCYST-FF975	Long life + cysts	4-5/8"	9-3/4"	0.5 nominal	50,000 gallons	4
MAXCYST-FF20	Long life + cysts	4-5/8"	20"	0.5 nominal	150,000 gallons	6

C-MAX® Extruded Carbon Filter Cartridges

Full line of solid block activated carbon cartridges for water treatment.

MAX-VOC, Coconut shell carbon block cartridges for reduction of VOC's, cysts and extended Chlorine taste and odor reduction

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXVOC-975	Water washed	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXVOC-20	Water washed	2-7/8"	20"	0.5 nominal	40,000 gallons	6
MAXVOC-FF975	Water washed	4-5/8"	9-3/4"	0.5 nominal	50,000 gallons	4
MAXVOC-FF20	Water washed	4-5/8"	20"	0.5 nominal	150,000 gallons	6

MAX-T, Acid washed coconut shell carbon block cartridges for RO post treatment and improved, sweeter taste

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXT-975	Acid washed	2-7/8"	9-3/4"	5 nominal	5,000 gallons	12
MAXT-20	Acid washed	2-7/8"	20"	5 nominal	10,000 gallons	6
MAXT-FF975	Acid washed	4-5/8"	9-3/4"	5 nominal	18,000 gallons	4
MAXT-FF20	Acid washed	4-5/8"	20"	5 nominal	32,000 gallons	6

MAX-PB, Coconut shell carbon block cartridges for Lead and cyst reduction

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXPB-975	Lead + cysts	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXPB-20	Lead + cysts	2-7/8"	20"	0.5 nominal	40,000 gallons	6
MAXPB-FF975	Lead + cysts	4-5/8"	9-3/4"	0.5 nominal	50,000 gallons	4
MAXPB-FF20	Lead + cysts	4-5/8"	20"	0.5 nominal	150,000 gallons	6

MAX-CL, Thick wall carbon block for long life and high chlorine reduction. Reduces tastes, odors, fine particles. The best choice when a "super chlorine guzzler" is needed!

Part Number	Type	OD	Length	Micron Rating	Chlorine Reduction	No. / Case
MAXCL-975	Thick Wall	2-7/8"	9-3/4"	0.5 nominal	20,000 gallons	12
MAXCL-20	Thick Wall	2-7/8"	20"	0.5 nominal	45,000 gallons	6
MAXCL-FF975	Thick Wall	4-5/8"	9-3/4"	0.5 nominal	70,000 gallons	4
MAXCL-FF20	Thick Wall	4-5/8"	20"	0.5 nominal	150,000 gallons	6

Premium quality and economically priced C-Max® cartridges are in stock for immediate shipment!

WATTS® Extruded Carbon Block Filter Cartridges

Top-of-the-line coconut shell carbon block filter cartridge for chlorine, taste, odor and sediment reduction

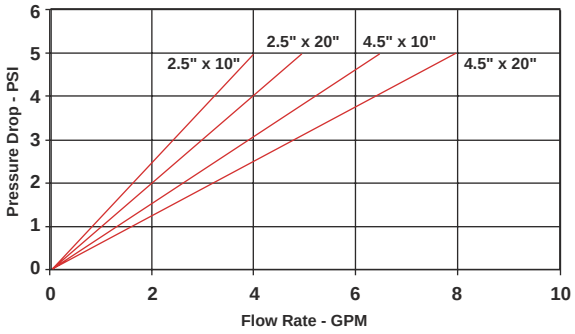
Features & benefits

- Low cost.
- Thick wall for superior performance.
- NSF Standard 42 component certified.
- Outperforms GAC cartridges four ways:
  1. Superior chlorine reduction
  2. Lower pressure drop
  3. Water cannot "channel" through media
  4. Lower cost
- Media wrap between center tube and carbon block to reduce carbon fines.
- 100% coconut shell carbon.
- Up to 99% chlorine reduction.
- Long life.

Recommended Flow Rate

Part Number	OD	Length	GPM
WCBCS975	2.5”	9-3/4”	1
WCBCS20	2.5”	20”	2
WCBCFF975	4.5”	9-3/4”	4
WCBCFF20	4.5”	20”	8

Initial Pressure Drop



Maximum operating pressure:	125 PSIG
Operating temperature:	50° F to 125° F 10° C to 52° C

*Performance tested @ flow with 2ppm chlorine.

* Tested and verified by independent labatory testing.

WCBCS975, WCBCS20, WCBCFF975 and WCBCFF20 have been tested and certified under NSF/ ANSI standard 42 for materials only.

Product codes

Part Number	Type	OD	Length	Mircon Rating*	Chlorine Reduction*	No. / Case
WCBCS975	Thick Wall	2.5”	9-3/4”	5 nominal	>4,000 Gal @ 1 gpm	20
WCBCS20	Thick Wall	2.5”	20”	5 nominal	>8,000 Gal @ 2 gpm	12
WCBCFF975	Thick Wall	4.5”	9-3/4”	5 nominal	>10,000 Gal @ 2 gpm	12
WCBCFF20	Thick Wall	4.5”	20”	5 nominal	>20,000 Gal @ 4 gpm	6

NOTE: Use only with microbiologically safe and adequately disinfected water, do not use with water of any unknown origin or water quality.

GAC filter cartridges

Full line, including standard GAC and GAC with KDF.

GAC cartridge specifications

Media	Water washed coconut shell activated carbon
Cartridge body	NSF listed polypropylene
Minimum / maximum working pressure	20 psi / 125 psi
Minimum / maximum temperature	40° F / 100° F (4° C / 38°C)
Maximum flow rate	1 GPM, std. 9-3/4"; 3 GPM, 4.5"x9-3/4"; 5 GPM 4.5"x20"

Watts® GAC cartridge (granular coconut carbon)

Part Number	Type	O.D.	Length	Capacity (gals.)	No. / case
WGAC-975	Coconut shell	2-3/4"	9-3/4"	2,500	20
WGAC-20	Coconut shell	2-3/4"	20"	5,000	15

Water washed coconut shell granular activated carbon cartridges (GAC)

Part Number	Type	O.D.	Length	Capacity (gals.)	No. / case
GAC10N	GAC	2-3/4"	9-3/4"	2,500	24
GAC20NRW	GAC	2-3/4"	20"	5,000	24
GAC-BB10	GAC	4-1/2"	9-3/4"	7,500	8
GAC-BB20	GAC	4-1/2"	20"	15,000	4

GAC + KDF 55 for longer life and enhanced performance for municipal water

Part Number	Type	O.D.	Length	Capacity (gals.)	No. / case
GAC10N/KDF	GAC + KDF55	2-3/4"	9-3/4"	2,500	24
GAC-BB20K/1800	GAC + KDF55	4-1/2"	20"	20,000	4

GAC + KDF85 for longer life and enhanced performance for well water

Part Number	Type	O.D.	Length	Capacity (gals.)	No. / case
FPKDF85-975	GAC + KDF 85	2-3/4"	9-3/4"	2,500	24
FPKDF85-BB-20	GAC + KDF 85	4-1/2"	20"	20,000	4

Specialty Cartridges

Full range of specialty cartridges for water treatment applications.

Mixed bed DI resin cartridge specifications

Application	Demineralization
Capacity	See chart below
Design flow rate	See chart below
Maximum temperature	100°F (38°C)
Minimum temperature	40°F (5°C)
Maximum pressure	125 PSI (8.6 bar)
Minimum pressure	20 PSI (1.4 bar)
Micron rating	Not rated

Mixed bed DI resin for demineralization. (Ideal cartridge to install post RO to lower TDS.)

Part Number	O.D.	Length	Media	Capacity (Grains)	Flow Rate	No. Case
FPMBDIR-975	2-1/2"	9-3/4"	Purolite® (w/color change indicator)	300	1.0	24
FPMBDIR-20	2-1/2"	20"	Purolite® (w/color change indicator)	700	1.0	12
FPMBDIR-BB-975	4-1/2"	9-3/4"	Purolite® (w/color change indicator)	900	2.0	8
FPMBDIR-BB-20	4-1/2"	20"	Purolite® (w/color change indicator)	1,900	3.0	4

Cation resin cartridge specifications

Application	To reduce water hardness
Capacity	See chart below
Design flow rate	See chart below
Maximum temperature	100°F (38°C)
Minimum temperature	40°F (5°C)
Maximum pressure	125 PSI (8.6 bar)
Minimum pressure	20 PSI (1.4 bar)

Cation resin cartridges for water softening. (Ideal for pre RO to reduce water hardness.)

Part Number	O.D.	Length	Media	Capacity (Grains)	Flow Rate	No. Case
FPCATR-975	2-1/2"	9-3/4"	100% Dow® Cation resin	800	1.0	24
FPCATR-20	2-1/2"	20"	100% Dow® Cation resin	1,900	1.0	12
FPCATR-BB-975	4-1/2"	9-3/4"	100% Dow® Cation resin	2,700	2.0	8
FPCATR-BB-20	4-1/2"	20"	100% Dow® Cation resin	5,400	3.0	4

Nitrate selective resin for Nitrate reduction.

Part Number	O.D.	Length	Media	Capacity (Grains)	Flow Rate	No. Case
FPNSR-975	2-1/2"	9-3/4"	Tulsion® Nitrate selective	4,000	0.5	24
FPNSR-BB-20	4-1/2"	20"	Tulsion® Nitrate selective	16,000	3.0	4

Calcite + Coconut Shell GAC to neutralize acidic water, reduce leaching of metal plumbing components and for use post RO to raise TDS.

Part Number	O.D.	Length	Media	Capacity (Gal)	Flow Rate	No. Case
FPCR-975	2-1/2"	9-3/4"	Calcium Carbonate + GAC	2,500	1.0	24

Warning: Do not use cartridges listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the cartridge.

GAC + Phosphate cartridge specifications

Application	Carbon treatment + scale reduction
Capacity	See chart below
Design flow rate	See chart below
Maximum temperature	100°F (38°C)
Minimum temperature	40°F (5°C)
Maximum pressure	125 PSI (8.6 bar)
Minimum pressure	20 PSI (1.4 bar)

GAC + Phosphate (For carbon treatment plus scale reduction.)

Part Number	O.D.	Length	Media	Capacity (Gal)	Flow Rate	No. Case
FPGACP-975	2-1/2"	9-3/4"	GAC + 8 oz. Phosphate	2,000	1.0	24

KDF85 + Coconut Shell GAC to reduce iron & hydrogen sulfide in ground water (point-of-entry)

Part Number	O.D.	Length	Media	Capacity (Gal)	Flow Rate	No. Case
FPKDF85-975	2-1/2"	9-3/4"	KDF85 + GAC	2,500	1.0	12
FPKDF85-BB-20	4-1/2"	20"	KDF85 + GAC	20,000	4.0	4

KDF® 85 for ground water

KDF 85 process medium is an effective ferrous iron and hydrogen sulfide H_2S) removal agents that may be used alone or to to protect existing water filtration / purification technologies in point-of-entry treatment of ground water supplies. This unique and patented medium consists of copper-zinc granules that use redox (exchange of electrons) to effectively reduce / remove iron. hydrogen sulfide, and microorganisms in potable water, without the use of chemicals. KDF85 is ideal for whole house water treatment using ground water.

KDF55 + Coconut Shell GAC for enhanced chlorine reduction in municipal water (point-of-entry)

Part Number	O.D.	Length	Media	Capacity (Gal)	Flow Rate	No. Case
GAC10N/KDF	2-1/2"	9-3/4"	KDF55 + GAC (.75 lbs. KDF)	2,500	1.0	24
GAC-BB20K/1800	4-1/2"	20"	KDF55 + GAC (4 lbs. KDF)	20,000	4.0	4

KDF® 55 for municipal water

KDF 55 process medium is an effective chlorine removal agents that may be used in point-of-entry municipal water supplies. This unique, innovative, enviromentally responsibile and patented medium consists of high purity copper-zinc granules that use redox (exchange of electrons) to effectively reduce / remove chlorine and control microorganisms in potable water, without the use of chemicals. KDF55 is ideal for whole house water treatment and in commerical buildings to reduce chlorine in municipal water with concentrations up to 5 ppm.

Warning: Do not use cartridges listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the cartridge.

Arsenic reduction cartridge specifications

Media type	Granular Ferric Oxide
Contaminant reduction	Arsenic V and III
Capacity	1,000 gals. (2-3/4" OD); 3,000 gals. (4-1/2" OD)
Design flow rate	0.5 GPM (both sizes)
Initial pressure drop	< 8 psi at 0.5 GPM
Maximum temperature	100°F (38°C)
Minimum temperature	40°F (5°C)
Maximum pressure	125 PSI (8.6 bar)
Minimum pressure	20 PSI (1.4 bar)
Micron rating	25 nominal

Recommended water quality: pH, 6.5 - 8.5; Iron,<0.5 ppm Manganese<0.005 ppm.

Arsenic reduction cartridges

Part Number	O.D.	Length	Media	Capacity (Gal)	Flow Rate	No. Case
FPAR-975	2-1/2"	9-3/4"	Arsenic reduction	1,000	0.75	24

Iron reduction cartridge specifications

Reduction for	Ferrous iron (dissolved), up to 3 ppm
Capacity	25,000 gals (3 ppm); 40,000 gals. (2 ppm); 80,000 gals. (1 ppm)
Design flow rate	4 - 6 GPM
Maximum temperature	100°F (38°C)
Minimum temperature	40°F (5°C)
Maximum pressure	125 PSI (8.6 bar)
Minimum pressure	20 PSI (1.4 bar)

Recommended water quality: pH, >7.0 Silica, <100 ppm; Manganese, <1 ppm; Iron,<3 ppm; Iron Bacteria, none; Hydrogen Sulfide, none.

Iron reduction cartridge for whole house to remove dissolved iron, metallic taste & stains from plumbing fixtures.

Part Number	O.D.	Length	Description	Flow Rate (GPM)	No. Case
FPIR-BB-20	4-1/2"	20"	Radial flow iron reduction cartridge	4 - 6	6

Note: Flow rates are for sufficient contact time and are indicated in GPM, per cartridge. Users should base actual flow rates on water quality, throughput requirements and performance criteria.

Warning: Do not use cartridges listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the cartridge.

In-Line Filters

In-line filters for reverse osmosis systems, ice makers and other water treatment needs.

In-line filters

For pre & post RO and ice maker filtration.

- AICRO® (our best selling in-line filter)
- AICRO-JGK* (With J. Guest fittings.)

* Coconut shell activated carbon. Rated for flow rates to 0.75. GPM and 1,500 gallons capacity

NSF®

CERTIFIED ANSI / NSF STANDARD 42 (AICRO)

GAC

Part Number	O.D.	Length	Media	Type	Fitting Size	Fitting Type	No. / Case
CL10STT33	2”	10”	GAC	With mesh pre-filter	1/4”	FNPT	25
GS10PLUSB	2”	10”	GAC	Acid washed bituminous	1/4”	FNPT	25

Coconut shell GAC

Part Number	O.D.	Length	Media	Type	Fitting Size	Fitting Type	No. / Case
AICRO	2”	10”	GAC	Coconut shell	1/4”	FNPT	25
AICRO-JGK	2”	10”	GAC	Coconut shell	1/4”	Quick ct	25
K2533SS	2”	10”	GAC	Coconut shell	1/4”	JG Elbow	25
CL6ROT33	2”	6”	GAC	Acid wash coconut shell	1/4”	FNPT	25
CL10ROT33	2”	10”	GAC	Acid wash coconut shell	1/4”	FNPT	25
K2333JJ	2”	6”	GAC	Acid wash coconut shell	1/4”	J. Guest	25
K2533JJ	2”	10”	GAC	Acid wash coconut shell	1/4”	J. Guest	25
K2633JJ	2.5”	12”	GAC	Acid wash coconut shell	1/4”	J. Guest	25
GS6ROB	2”	6”	GAC	Coconut shell	1/4”	FNPT	25
GS10ROB	2”	10”	GAC	Coconut shell	1/4”	FNPT	25
GS10ROC	2”	10”	GAC	Coconut shell	3/8”	FNPT	25
GS10ROG	2”	10”	GAC	Coconut shell	1/4”	J. Guest	25

GAC with Phosphate for scale reduction

Part Number	O.D.	Length	Media	Type	Fitting Size	Fitting Type	No. / Case
SCL6	2”	6”	GAC	Phosphate	1/4”	FNPT	50
SCL10	2”	10”	GAC	Phosphate	1/4”	FNPT	25
K2386JJ	2”	6”	GAC	Phosphate	1/4”	J. Guest	25
K2586JJ	2”	10”	GAC	Phosphate	1/4”	J. Guest	25
K2586SS	2”	10”	GAC	Phosphate	1/4”	J. Guest	25
K5686JJ	2.5”	12”	GAC	Phosphate	1/4”	J. Guest	25
GS6ALSB	2”	6”	AW GAC	Phosphate	1/4”	FNPT	25
GS10ALSB	2”	10”	AW GAC	Phosphate	1/4”	FNPT	25

GAC + KDF

Part Number	O.D.	Length	Media	Type	Fitting Size	Fitting Type	No. / Case
AICRO/KDF050	2”	10”	CS GAC	0.5 Lb. KDF55	1/4”	FNPT	25
AICRO/KDF075	2”	10”	CS GAC	0.75 Lb. KDF55	1/4”	FNPT	25
GS6EXTRA.25B	2”	6”	CS GAC	0.25 Lb. KDF55	1/4”	FNPT	25
GS6EXTRA.5B	2”	6”	CS GAC	0.5 Lb. KDF55	1/4”	FNPT	25
GS210EXTRA1	2.5”	11”	CS GAC	1.0 Lb. KDF55	1/4”	FNPT	20

Warning: Do not use filters listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the filter.

In-Line Filters

In-line filters with GAC and Calcite to raise TDS

Part Number	O.D.	Length	Media	Type	Fitting Size	Fitting Type	No. / Case
GS10CAL/ROB	2"	10"	GAC	With Calcite	1/4"	FNPT	25

In-line filters for sediment

Part Number	O.D.	Length	Media	Micron	Fitting Size	Fitting Type	No. / Case
AIPRO	2"	10"	PP SPUN	5	1/4"	FNPT	25
CL10PF5	2"	10"	PP SPUN	5	1/4"	FNPT	25
K2305JJ	2"	6"	PP SPUN	5	1/4"	J. Guest	25
K2505JJ	2"	10"	PP SPUN	5	1/4"	J. Guest	25
K5605JJ	2"	12"	PP SPUN	5	1/4"	J. Guest	25
GS10SED/5B	2”	10”	PP SPUN	5	1/4"	FNPT	25

In-line filters with permanent heads

Ideal for beverage and food service applications with E-Z cartridge replacement.

Heads

Permanent heads with and without valve.

Heads

Part Number	Description	Fitting Size	Fitting Type	No. / Case
QHEAD	Head without valve	1/4"	FNPT	25
QHEAD-V	Complete head with valve	1/4"	FNPT	25

Replacable elements for permanent heads listed above.

Part Number	O.D.	Length	Media	Micron	Fitting Size	Fitting Type	No. / Case
Q5520	2.5"	10"	Carbon block	1	1/4"	FNPT	25
Q5515	2.5"	10"	Carbon block	1 (lead reduction)	1/4"	FNPT	25
Q5633	2.5”	12”	Acid washed	5	1/4"	FNPT	25
Q5505	2.5”	10”	Acid washed	5	1/4"	FNPT	25
Q5605	2.5”	12”	Acid washed	5	1/4"	FNPT	25
Q5586	2.5”	10”	Acid washed	5	1/4"	FNPT	25

Warning: Do not use filters listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the filter.

In-Line Filters

Aftermarket replacement cartridges

Part Number	Media	Description	Replacement For	No. Per Case
RS-21-SED5	Polypropylene	5µ Spun bonded SED.	Clack	25
RS-21-CB5	Carbon block	5µ Carbon block	Clack	25
RS-22-SED5	Polypropylene	5µ Spun bonded SED.	Hydrotech	25
RS-22-CB5	Carbon block	5µ Carbon block	Hydrotech	25
RS-23-SED5	Polypropylene	5µ Spun bonded SED.	Culligan	25
RS-23-CB5	Carbon Block	5µ Carbon block	Culligan	25

Everpure® type replacement elements

Part Number	Micron	Description	Replacement For	No. / Case
E5720-P	1	Block, phosphate	H-200	20
E5620-P	1	Block, phosphate	H-100	20
E5620	1	Carbon block	S-100	20

ELF-Series Filters

The ideal filter option for the commercial food service industry.

10” cartridge

Elf filters, head and bracket

15” cartridge (XL)

Permanent filter heads with replacable cartridge elements for high flow and high capacity to 20,000 gallons. Rated for temperatures to 100°F and 125 psi. Some product codes are NSF certified.

Features

- Better tasting water
- Protects equipment from hard water
- Lead & cyst specific media available
- Large 3-1/2" x 10" and 15" lengths
- Capacities to 20,000 gallons
- Flow rates up to 2 GPM
- Two piece bayonet style replacable cartridges with permanent head
- Best cost to performance ratio in the industry!

NSF®

ANSI / NSF
STANDARD 42
CERTIFIED
(ELF-1M, ELFXL-1M)

Models and product codes

Product Code	Taste &Odor Reduction	Chlorine Reduction	Cysts	Lead Reduction	Scale Inhibitor (To protect equip.)	Micron	Length	Capacity (Gals.)	No. / Case
ELF-HEAD									1
ELF-BRACKET									1
ELF-1M	•	•	•			1	10"	15,000	12
ELF-XL-1M	•	•	•			1	15"	20,000	18
ELF-1ML-P	•	•	•	•	•	1	10"	2,500	12
ELF-XL-1ML-P	•	•	•	•	•	1	15"	3,000	18
ELF-10M-P	•	•			•	10	10"	10,000	12
ELF-XL-10M-P	•	•			•	10	15"	15,000	18

Note: ELF-1M and ELFXL-1M is NSF Standard 42 certified.

Warning: Do not use filters listed in this section with water that is microbiologically unsafe or unknown quality without proper disinfection before or after the filter.

Additional Filter Options

Shower filters and Doulton® brand ceramic filters for bacteria reduction.

New shower filter from Flowmatic®

Flowmatic's high quality Dial-A-Date shower filter allows users to easily set month of installation or the month filters need to be replaced.

- 100% KDF-55 media
- Chlorine reduction
- Quality retail carton
- Will not rust or corrode
- Dial-A-Date ring

Part Number	Description	No. Per Case
FMSHWR-KDF55	Retail box	1
FMSHWR-KDF55-PLAIN	Plain box	1

Doulton® brand ceramic filters

Cleanable Doulton self-sterilizing elements can be used over and over to reduce filtration costs. Capable of removing 99.99% of suspended solids and 100% of Cryptosporidium, Giardia Lamblia cysts and bacteria. Designed to comply with the most stringent potable water standards.

- Cleanable
- Self-sterilizing
- Can be used over and over, reducing cost
- Capable of removing 99.99% of suspended solids and 100% of Cryptosporidium, Giardia Cysts, and bacteria.

Part Number	Size	Model	No. Per Case
DS-1000	1/4" BSP thread	Sterasyl	25
DSS-1000	1/4" BSP thread	Super Sterasyl	25
DUC-1000	1/4" BSP thread	Ultra Carbon	25
DS-OBE	Double open ends	Sterasyl	25
DSC-OBE	Double open ends	Super Carbon	25
DUC-OBE	Double open ends	Ultra Carbon	25

Flowmatic® Empty Refillable Canisters

Plastic refillable canisters for activated carbon and other filter media for water treatment.

Refillable canisters for granular media

Plastic refillable canisters for activated carbon and other granular filter media. Low cost and reusable! Made using FDA grade polypropylene. Available in white and clear.

Refillable canisters for granular filter media

Part Number	Length	OD	Color	Volume (ml)	Volume (cu. in.)	No. Per Case
RC-C-975	9-3/4”	2-1/2”	Clear	803	49	24
RC-W-975	9-3/4”	2-1/2”	White	803	49	24
RC-C-20	20”	2-1/2”	Clear	1,786	109	24
RC-W-20	20”	2-1/2”	White	1,786	109	24
RC-C-BB-975	9-3/4”	4-1/2”	Clear	2,130	130	8
RC-W-BB-975	9-3/4”	4-1/2”	White	2,130	130	8
RC-C-BB-20	20”	4-1/2”	Clear	4,572	279	4
RC-W-BB-20	20”	4-1/2”	White	4,572	279	4

Flow-Max® Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Flow-Max filter cartridges outperform wound, spun, melt blown, resin bonded and other "depth" type filter elements because our cartridges are pleated to provide increased surface area and longer life.

Lower pressure drop is another significant advantage, using Flow-Max pleated cartridges, which allows for increased flow rates and the use of smaller filter housings to reduce capital equipment costs.

Further savings are provided because our 100% synthetic filter media is cleanable, five micron and up, to lower cartridge replacement costs.

Flow-Max filter cartridges outperform other pleated elements because our high-performance filter media is systematically produced using 100% synthetic fibers, with no binders or additives to leave a residue, foam or contaminate.

Our filter media is dramatically thicker than other products. For this reason, Flow-Max cartridges provide "depth" filtration for greater sediment removal, along with more surface area with our pleated design.

A multi-ply laminate is used with our sub and one micron absolute grades for longer life and greater solids removal. (See right.)

Features

Filter media is pleated for greater surface area.

Synthetic filter media is cellulose-free.

"Thicker" filter media has a greater capacity to capture and retain particles, compared to thin, more rigid media types, which have less void space for particle retention.

One micron absolute and 0.35 media use a multi-ply laminate for superior performance.

Long lengths have netting to hold pleats in place.

All cartridge types and lengths are wrapped.

Full product line (types, lengths & micron ratings).

Benefits

Low pressure drop; long life; reduced filtration costs, compared to wound and spun cartridges.

No additives or binders, which may cause foaming.

Increased dirt holding capacity; longer life; fewer cartridge replacements needed; and reduced filtration costs, compared to other pleated cartridge suppliers.

Increased particle removal efficiency; longer life; and reduced cost per gallon filtered.

Superior performance and appearance.

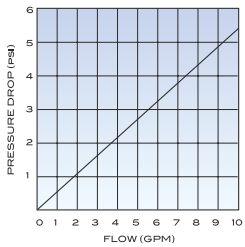
Provides security at no additional cost.

Greater selection from your single source supplier!

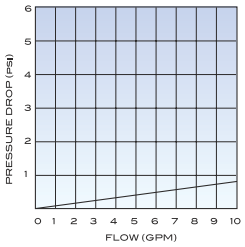
Flow-Max® cartridges cost less to use . . . regardless what they cost to buy!

Lower pressure drop for higher flow rates

Flow-Max® cartridges are pleated, so initial pressure drop is significantly less compared to depth cartridges, such a wound, spun, melt blown and resin bonded. As a result, higher flow rates are possible, reducing filter housing size requirements to lower capital equipment costs.

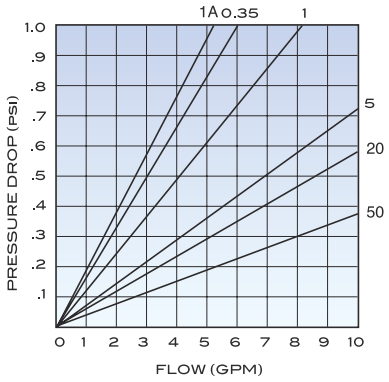


Depth cartridge
(5 micron)

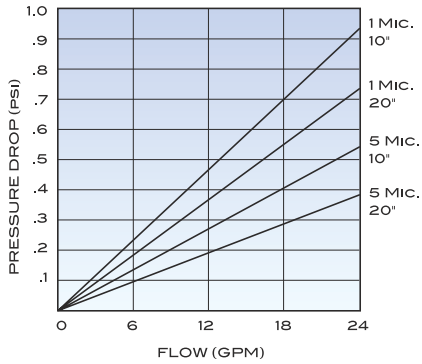


Flow-Max® cartridge
(5 micron)

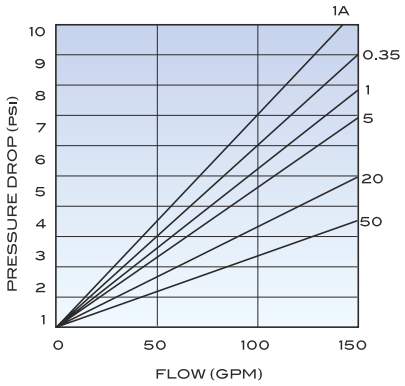
Use the pressure drop charts shown below to help determine the ideal flow rate for your particular application:



Standard cartridges (9-3/4")



Full-Flow (B-B) cartridges



Jumbo cartridges

Note: Pressure drop data shown above include filter housing and cartridge.

Flow rates

Maximum flow rate guidelines for Flow-Max cartridges are shown below:

Micron Rating	Maximum Flow Rates Per Cartridge (GPM)							
	Standard Cartridge			10" Full-Flow	20" Full-Flow	Jumbo Cartridge		
	9-3/4"	20"	29-1/4"			40	90	170
1 Absolute	3	6	9	8	12	20	40	80
0.35 Micron	4	8	12	9	13	25	50	100
1 Micron	4	8	12	10	15	30	60	120
5 Micron	7	14	21	15	25	50	100	150
20 Micron	8	16	24	15	25	50	100	150
50 Micron	10	20	30	15	25	50	100	150

Note: Filter housing selection should also be considered when flow rate per cartridge is determined.

Washable & reusable

Flow-Max® cartridges are washable and reusable, five micron and up to reduce filtration costs. For best results, direct spray into pleats to dislodge sediment. Or, let dry and brush off filter cake from surface of the media.

All Flow-Max® cartridges are individually shrink wrapped for purity

Flow-Max® Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Standard 2-3/4” OD x 9-3/4” length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-975	Synthetic	1 Absolute	24
FM-0.35-975	Synthetic	0.35	24
FM-1-975	Synthetic	1	24
FM-5-975	Synthetic	5	24
FM-20-975	Synthetic	20	24
FM-50-975	Synthetic	50	24
FM-100-975	Synthetic	100	24

Standard 2-3/4” OD x 19-1/2” length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1-195	Synthetic	1	24
FM-5-195	Synthetic	5	24
FM-20-195	Synthetic	20	24
FM-50-195	Synthetic	50	24

Standard 2-3/4” OD x 20” length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-20	Synthetic	1 Absolute	24
FM-0.35-20	Synthetic	0.35	24
FM-1-20	Synthetic	1	24
FM-5-20	Synthetic	5	24
FM-20-20	Synthetic	20	24
FM-50-20	Synthetic	50	24

Standard 2-3/4” OD x 29-1/4” length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1A-2925	Synthetic	1 Absolute	24
FM-0.35-2925	Synthetic	0.35	24
FM-1-2925	Synthetic	1	24
FM-5-2925	Synthetic	5	24
FM-20-2925	Synthetic	20	24
FM-50-2925	Synthetic	50	24

Standard 2-3/4” OD x 40” length

Product Code	Media Type	Micron Rating	Number Per Case
FM-1-40	Synthetic	1	24
FM-5-40	Synthetic	5	24
FM-20-40	Synthetic	20	24
FM-50-40	Synthetic	50	24

Specifications

Filter media	Synthetic (100% cellulose-free)
End caps	Plastisol (PVC)
Center tubes	Polypropylene
Temperature range	40°F - 140°F (4.4°C - 60°C)
Maximum Pressure	40 PSID
Recommended change out	20 - 30 PSID
Flow rate per 10” cartridge	3-10 GPM, depending on micron rating

Flow-Max® Pleated Filter Cartridges

Greater surface area for longer life and reduced filtration costs.

Highly efficient, five ply filter media

Our one micron absolute and 0.35 micron filter cartridges use a five ply filter media for greater efficiency and longer life. They are ideal for surface water filtration to reduce Cryptosporidium and Giardia cysts.

Full-Flow (B-B) 4-1/2” OD x 9-3/4” length

Product Code	Length	Media Type	Micron Rating	Number Per Case
FM-BB-10-1A	9-3/4”	Synthetic	1 Absolute	8
FM-BB-10-0.35	9-3/4”	Synthetic	0.35	8
FM-BB-10-1	9-3/4”	Synthetic	1	8
FM-BB-10-5	9-3/4”	Synthetic	5	8
FM-BB-10-20	9-3/4”	Synthetic	20	8
FM-BB-10-50	9-3/4”	Synthetic	50	8

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

Full-Flow (B-B) 4-1/2” OD x 20” length

Product Code	Length	Media Type	Micron Rating	Number Per Case
FM-BB-20-1A	20”	Synthetic	1 Absolute	4
FM-BB-20-0.35	20”	Synthetic	0.35	4
FM-BB-20-1	20”	Synthetic	1	4
FM-BB-20-5	20”	Synthetic	5	4
FM-BB-20-20	20”	Synthetic	20	4
FM-BB-20-50	20”	Synthetic	50	4

Note: Cartridges listed above fit in Full-Flow and Big-Blue® filter housings.

Specifications (synthetic media for sediment)

Maximum temperature	140°F (60°C)	Center tubes	PVC
Minimum temperature	40°F (4.4°C)	End caps	Molded Urethane
Maximum pressure	40 PSID	Maximum flow rate, model 40	50 GPM (12m³HR)
Recommended change out	25-30 PSID	Maximum flow rate, model 90	100 GPM (24m³HR)
Filter media	PE & PP	Maximum flow rate, model 170	150 GPM (36m³HR)

Flow-Max® Jumbo Filter Cartridges

With cellulose-free synthetic and mesh media in a wide range of micron ratings.

Standard Synthetic Media

Flow-Max jumbo filter cartridge

PP Mesh Media

Model 40

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
40	1 Absolute	FMHC-40-1A	N. A.	1
	0.35	FMHC-40-0.35	N. A.	1
	1	FMHC-40-1	N. A.	1
	5	FMHC-40-5	N. A	1
	20	FMHC-40-20	N. A.	1
	50	FMHC-40-50	FMHC-40-50M	1
	100	FMHC-40-100	N. A.	1
	150	N. A.	FMHC-40-150M	1

Model 90

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
90	1 Absolute	FMHC-90-1A	N. A.	1
	0.35	FMHC-90-0.35	N. A.	1
	1	FMHC-90-1	N. A.	1
	5	FMHC-90-5	N. A	1
	20	FMHC-90-20	N. A.	1
	50	FMHC-90-50	FMHC-90-50M	1
	100	FMHC-90-100	N. A.	1
	150	N. A.	FMHC-90-150M	1

Model 170

Filter Housing Model Number	Micron Rating	Product Code with Synthetic Media	Product Code with Mesh Media	Number Per Case
170	1 Absolute	FMHC-170-1A	N. A.	1
	0.35	FMHC-170-0.35	N. A.	1
	1	FMHC-170-1	N. A.	1
	5	FMHC-170-5	N. A.	1
	20	FMHC-170-20	N. A.	1
	50	FMHC-170-50	FMHC-170-50M	1
	100	FMHC-170-100	N. A.	1
	150	N. A.	FMHC-170-150M	1

Flow-Max® High Temp Jumbo Cartridges

Ideal for high temperature industrial water and oil filtration.

Applications

- High temperature industrial water filtration
- Lubricating oil
- Cutting fluids
- Solvents
- Distillate fuel
- Fuel oil
- Hydraulic fluids

Specifications	Data
Maximum temperature	250˚F (121˚C)
Minimum temperature	-20˚F (-29˚C)
Maximum pressure	70 PSID (482 k PA)
Recommended change out	25 PSID (172 k PA)
Media	Phenolic impregnated cellulose
End caps, cores, outer body	Electro plated tin

Jumbo Model 40 (7-3/4” x 9-5/8”) for flow rates to 50 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-40-5-HT	40	9-5/8”	5	1
FMPIC-40-20-HT	40	9-5/8”	20	1
FMPIC-40-50-HT	40	9-5/8”	50	1

Jumbo Model 90 (7-3/4” x 19-1/2”) for flow rates to 100 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-90-5-HT	90	19-1/2”	5	1
FMPIC-90-20-HT	90	19-1/2”	20	1
FMPIC-90-50-HT	90	19-1/2”	50	1

Jumbo Model 170 (7-3/4” x 30-3/4”) for flow rates to 150 GPM

Part Number	Model Number	Length	Micron	No. / case
FMPIC-170-5-HT	170	30-3/4”	5	1
FMPIC-170-20-HT	170	30-3/4”	20	1
FMPIC-170-50-HT	170	30-3/4”	50	1

Note: Jumbo 40, 90 and 170 cartridges listed above fit in Flow-Max housings only.

Important:
Phenolic impregnated cellulose cartridges are not suitable for potable water. Do not use with faucet.

Flow-Max® HP Series Filter Cartridges

High efficiency pleated filter cartridges

Flow-Max HP series filter cartridges are cost effective, disposable, filter elements for a wide range of applications. Flow-Max HP cartridges are constructed of highly efficient pleated polypropylene filter media with extended filter area to provide high flow rates, low pressure drop and increased dirt holding capacity.

Features

- 100% polypropylene
- Ratings from 0.2 to 50 micron
- FDA listed polypropylene components
- Removal efficiencies to 99.98%
- High surface area
- Long service life & reduced maintenance costs
- Fixed pore construction for reliability

Applications

- High purity water
- Traps for DI resin
- Electronics
- Pre filtration for RO
- Magnetic tape coatings
- Aqueous solutions
- Plating solutions
- Chemicals
- Cosmetics
- Inks
- Food & beverage
- Bottled water
- Edible oils
- Waste water

Specifications

Components	Data
Filter media	Polypropylene
End caps	Polypropylene
Center tubes	Polypropylene
Cage	Polypropylene
Gaskets & o-rings	EPDM, standard. (Buna-N, Viton and Silicone are optional.)
Micron ratings	0.2, 0.45, 1, 2, 5, 10, 25 & 50
Operating temperature	175° F (80° C) maximum
Collapse pressure	130 psid (8.9 bar) maximum
Change out	35 psid (2.4 bar) maximum
FDA	All materials comply with FDA 174.5, 177.1520 & 177.1630 for contact with foods & beverages

Dimensions

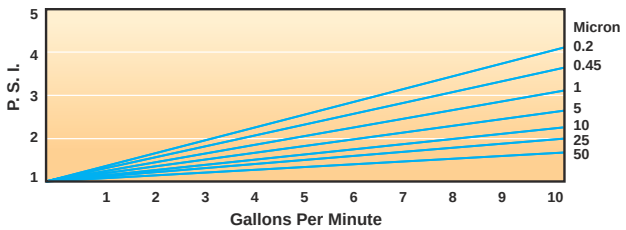
Nominal lengths	4-7/8”, 9-3/4”, 10”, 20”, 30” & 40”
Outside diameter	2.5” (6.35 cm)
Inside diameter	1.0” (2.54 cm)

Filter removal efficiency

Beta ratio Efficiency	10000 99.99%	5000 99.98%	100 99%	50 98%	10 90%
0.2 micron	0.35	0.2	0.1	----	----
0.45	0.6	0.45	0.3	0.2	----
1 micron	1.2	1.0	0.6	0.3	0.25
2 micron	2.5	2.0	1.5	1.0	0.8
5 micron	8.0	5.0	4.0	3.0	2.0
10 micron	13.0	10.0	8.0	7.0	5.0
25 micron	32.0	25.0	19.0	15.0	13.0
50 micron	66.0	50.0	44.0	32.0	26.0

Relative performance data was developed using laboratory tests, which may be used for guidelines in cartridge selection. The single-pass test method was used with particle counters and 3 GPM flow per 10” cartridge. Results vary, and actual field tests may be necessary to determine final cartridge selection.

Initial pressure drop per 10” cartridge



DOE | 222 or 226 / Flat | 222 or 226 / Fin

Flow-Max® HP Series Filter Cartridges

Product code	Micron	Length	End Cap	No./case	Ship weight
FPP-0.2-975-DOE	0.2	9-3/4”	DOE	24	12 lbs.
FPP-0.2-20-DOE	0.2	20”	DOE	12	11 lbs.
FPP-0.2-30-DOE	0.2	30”	DOE	12	17 lbs.
FPP-0.2-40-DOE	0.2	40”	DOE	12	21 lbs.
FPP-0.2-10-222	0.2	10”	222 / flat	24	12 lbs.
FPP-0.2-20-222	0.2	20”	222 / flat	12	11 lbs.
FPP-0.2-30-222	0.2	30”	222 / flat	12	17 lbs.
FPP-0.2-40-222	0.2	40”	222 / flat	12	21 lbs.
FPP-0.2-10-222F	0.2	10”	222 / fin	24	12 lbs.
FPP-0.2-20-222F	0.2	20”	222 / fin	12	11 lbs.
FPP-0.2-30-222F	0.2	30”	222 / fin	12	17 lbs.
FPP-0.2-40-222F	0.2	40”	222 / fin	12	21 lbs.
FPP-0.45-975-DOE	0.45	9-3/4”	DOE	24	12 lbs.
FPP-0.45-20-DOE	0.45	20”	DOE	12	11 lbs.
FPP-0.45-30-DOE	0.45	30”	DOE	12	17 lbs.
FPP-0.45-40-DOE	0.45	40”	DOE	12	21 lbs.
FPP-1-975-DOE	1	9-3/4”	DOE	24	12 lbs.
FPP-1-20-DOE	1	20”	DOE	12	11 lbs.
FPP-1-30-DOE	1	30”	DOE	12	17 lbs.
FPP-1-40-DOE	1	40”	DOE	12	21 lbs.
FPP-1-10-222	1	10”	222 / flat	24	12 lbs.
FPP-1-20-222	1	20”	222 / flat	12	11 lbs.
FPP-1-30-222	1	30”	222 / flat	12	17 lbs.
FPP-1-40-222	1	40”	222 / flat	12	21 lbs.
FPP-1-10-222F	1	10”	222 / fin	24	12 lbs.
FPP-1-20-222F	1	20”	222 / fin	12	11 lbs.
FPP-1-30-222F	1	30”	222 / fin	12	17 lbs.
FPP-1-40-222F	1	40”	222 / fin	12	21 lbs.
FPP-5-975-DOE	5	9-3/4”	DOE	24	12 lbs.
FPP-5-20-DOE	5	20”	DOE	12	11 lbs.
FPP-5-30-DOE	5	30”	DOE	12	17 lbs.
FPP-5-40-DOE	5	40”	DOE	12	21 lbs.
FPP-5-10-222	5	10”	222 / flat	24	12 lbs.
FPP-5-20-222	5	20”	222 / flat	12	11 lbs.
FPP-5-30-222	5	30”	222 / flat	12	17 lbs.
FPP-5-40-222	5	40”	222 / flat	12	21 lbs.
FPP-5-10-222F	5	10”	222 / fin	24	12 lbs.
FPP-5-20-222F	5	20”	222 / fin	12	11 lbs.
FPP-5-30-222F	5	30”	222 / fin	12	17 lbs.
FPP-5-40-222F	5	40”	222 / fin	12	21 lbs.

Note: 2, 10, 25, and 50 micron ratings are also available by special order. (Substitute micron rating at appropriate place in product code.) Standard gaskets and o-rings are EPDM. Buna-N, Viton and Silicone are also available. (For special gaskets or o-rings, add “B” for Buna-N, “V” for Viton or “S” for Silicone at end of product code.) For 226 cartridges, substitute “226” for “222”.

Watts® Pleated Cartridges

Greater surface area, longer life, reduced filtration costs!

Watts pleated cartridges outperform wound, spun, melt blown, resin bonded and other “depth” style filter elements because our pleated cartridges provide increased surface area, lower pressure drop and longer service life. Our 100% synthetic media is washable and cleanable, five micron and up, to reduce filtration costs.

Features	Benefits
Filter media is pleated…	More surface area for greater dirt holding capacity; lower initial pressure drop; higher flow rates; longer life; reduced filtration costs.
Cellulose-FREE, 100% synthetic media	Superior performance with no additives or binders to break down which may cause foaming and filter degradation.
Wide range of lengths and micron ratings	Full product line to satisfy your application.
Individually wrapped for purity	Additional security at no additional charge.
Washable and reusable, 5 micron and up	Reduce filter replacement costs.
Color-coded end caps (2-3/4” OD)	Easily identify standard OD replacements.
Economical price	Reduced filter costs for higher profits.

Pleated cartridges have eight times the surface area as depth cartridges!

This is why Watts® pleated cartridges cost less to use, regardless what they cost to buy!

Watts® Pleated Cartridges

Not all pleated cartridges perform the same!

"Ours"

VS.

"Theirs"

The difference is the media!

Watts, cellulose-free, 100% synthetic filter media allows the pleats to retain their form, maintaining a large amount of surface area. This allows the cartridge to handle higher solids loading and flow rates with a lower pressure drop that increases the filter efficiency and life, while reducing filter change out costs and frequency.

VS.

The cellulose blended pleats collapsed on one another, blinding off large amounts of the cartridges surface area. Premature blinding of the surface area reduces the flow capacity and efficiency while it raises the differential pressure, and contributes to a limited filter life and frequent filter change outs.

Flow rates

Maximum flow rate guidelines for watts cartridges are shown below:

Micron rating (Nominal)	Standard Cartridges (2-3/4" OD)			Full-Flow (B-B)	
	9-3/4"	20"	29-1/4"	9-3/4"	20"
1 Micron	4	8	12	15	25
5 Micron	7	14	21	15	25
20 Micron	8	16	24	15	25
50 Micron	10	20	30	15	25

Watts pleated specifications

Maximum temperature	140°F (60°C)
Minimum Temperature	40°F (4.4°C)
Maximum pressure	40 psid
Recommended change out	25 psid
Filter media (1 & 5 micron)	Polypropylene
Filter media (20 & 50 micron)	Polyester
Material - center tube	Polypropylene
Material - end caps	Molded Polyurethane
ID	1-1/6"

Washable and reusable

Watts pleated cartridges are washable and reusable, five micron and up to reduce filtration costs. For best results, direct spray into the pleats to dislodge the sediment.

Watts® Pleated Cartridges

Standard cartridges (2-3/4” OD)

Full-Flow (B-B)Cartridges (4-1/2” OD)

Standard 2-3/4” OD X 9-3/4” length

Product code	Media type	Micron	Color	Case / qty
WPC1-975	Synthetic	1	Tan	50
WPC5-975	Synthetic	5	White	50
WPC20-975	Synthetic	20	Blue	50
WPC50-975	Synthetic	50	Yellow	50

Standard 2-3/4” OD X 20” length

Product code	Media type	Micron	Color	Case / qty
WPC1-20	Synthetic	1	Tan	25
WPC5-20	Synthetic	5	White	25
WPC20-20	Synthetic	20	Blue	25
WPC50-20	Synthetic	50	Yellow	25

Standard 2-3/4” OD X 29-1/4” length

Product code	Media type	Micron	Color	Case / qty
WPC1-2925	Synthetic	1	Tan	25
WPC5-2925	Synthetic	5	White	25
WPC20-2925	Synthetic	20	Blue	25
WPC50-2925	Synthetic	50	Yellow	25

Standard 2-3/4” OD X 40” length

Product code	Media type	Micron	Color	Case / qty
WPC1-40	Synthetic	1	Tan	25
WPC5-40	Synthetic	5	White	25
WPC20-40	Synthetic	20	Blue	25
WPC50-40	Synthetic	50	Yellow	25

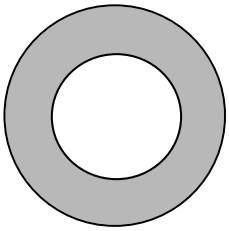
Full-Flow (B-B) 4-1/2” OD X 9-3/4” length

Product code	Media type	Micron	Color	Case / qty
WPC1FF975	Synthetic	1	Blue	18
WPC5FF975	Synthetic	5	Blue	18
WPC20FF975	Synthetic	20	Blue	18
WPC50FF975	Synthetic	50	Blue	18

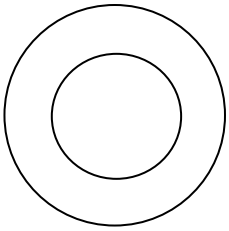
Full-Flow (B-B) 4-1/2” OD X 20” length

Product code	Media type	Micron	Color	Case / qty
WPC1FF20	Synthetic	1	Blue	9
WPC5FF20	Synthetic	5	Blue	9
WPC20FF20	Synthetic	20	Blue	9
WPC50FF20	Synthetic	50	Blue	9

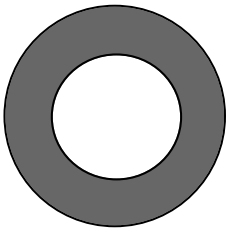
Identify cartridges easily with color coded end caps



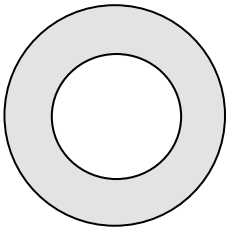
1 - Micron



5 - Micron



20 - Micron



50 - Micron

FLOW-PRO®

MELT BLOWN FILTER CARTRIDGES

Features & benefits

- Low cost
- Excellent chemical resistance
- Food grade for food and beverages
- No media migration
- High dirt holding capacity
- Wide range of lengths
- Five micron ratings

Specifications

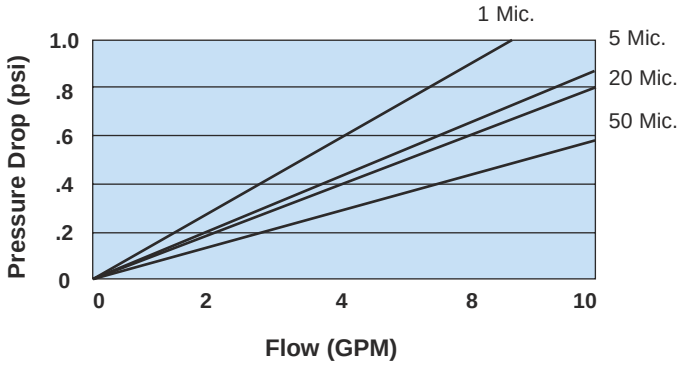
Material	Melt blown polypropylene
Maximum temperature	140˚ F / 60˚ C
Maximum pressure	40 PSID
Recommended change out	30 PSID
Maximum flow rate	2-8 GPM based on micron
Cartridge packaging	Shrink wrapped for purity

Applications

- Potable water
- Beverages
- Pre-filtration for RO
- Fine chemicals
- Electronics
- Metal finishing
- Plating solutions
- And more!

NSF®

ANSI / NSF STANDARD 42 COMPONENT CERTIFIED



Flow-Pro® Melt Blown Cartridges

ANSI / NSF STANDARD 42 COMPONENT CERTIFIED

Standard diameter (2-1/2")

5”

Part Number	Length	OD	Micron	No. / case
FPMB1-5	5"	2-1/2"	1	48
FPMB5-5	5"	2-1/2"	5	48
FPMB20-5	5"	2-1/2"	20	48
FPMB50-5	5"	2-1/2"	50	48

9-7/8”

FPMB1-978	9-7/8"	2-1/2"	1	48
FPMB5-978	9-7/8"	2-1/2"	5	48
FPMB10-978	9-7/8"	2-1/2"	10	48
FPMB20-978	9-7/8"	2-1/2"	20	48
FPMB25-978	9-7/8"	2-1/2"	25	48
FPMB50-978	9-7/8"	2-1/2"	50	48

20”

FPMB1-20	20"	2-1/2"	1	24
FPMB5-20	20"	2-1/2"	5	24
FPMB20-20	20"	2-1/2"	20	24
FPMB50-20	20"	2-1/2"	50	24

29-1/4”

FPMB5-2925	29-1/4"	2-1/2"	5	24

30”

FPMB1-30	30"	2-1/2"	1	24
FPMB5-30	30"	2-1/2"	5	24
FPMB20-30	30"	2-1/2"	20	24
FPMB50-30	30"	2-1/2"	50	24

40”

FPMB1-40	40"	2-1/2"	1	24
FPMB5-40	40"	2-1/2"	5	24
FPMB20-40	40"	2-1/2"	20	24
FPMB50-40	40"	2-1/2"	50	24

Full-Flow (B-B) 9-3/4" x 4-1/2" O.D. cartridges

Part Number	Length	OD	Micron	No. / case
FPMB-BB1-10	9-3/4"	4-1/2"	1	24
FPMB-BB5-10	9-3/4"	4-1/2"	5	24
FPMB-BB20-10	9-3/4"	4-1/2"	20	24
FPMB-BB50-10	9-3/4"	4-1/2"	50	24

Full-Flow (B-B) 20"x 4-1/2" O.D. cartridges

Part Number	Length	OD	Micron	No. / case
FPMB-BB1-20	20"	4-1/2"	1	12
FPMB-BB5-20	20"	4-1/2"	5	12
FPMB-BB20-20	20"	4-1/2"	20	12
FPMB-BB50-20	20"	4-1/2"	50	12

Flow-Pro® Grooved Melt Blown Cartridges

Grooved for more surface area and greater dirt holding capacity.

Specifications

Material	Melt blown polyproplylene
Maximum temperature	140˚ F / 60˚ C
Maximum pressure	40 PSID
Recommended change out	30 PSID
Maximum flow rate	2-8 GPM based on micron
Cartridge packaging	Shrink wrapped for purity

Grooved cartridges for increased surface area

Part Number	Length	OD	MIcron	No. / case
FPMBG-1-975	9-3/4”	2-1/2”	1	48
FPMBG-5-975	9-3/4”	2-1/2”	5	48
FPMBG-10-975	9-3/4”	2-1/2”	10	48
FPMBG-20-975	9-3/4”	2-1/2”	20	48
FPMBG-1-20	20”	2-1/2”	1	24
FPMBG-5-20	20”	2-1/2”	5	24

Wound Filter Cartridges

Exceptional value when depth filtration is required.

Features & benefits

- Low cost
- Polypropylene media for chemical resistance
- Food grade ingredients for potable water
- No leachables to contaminate downstream
- Wide range of lengths and micron ratings
- Cartridges with stainless steel center tubes for temperature applications

Product Number	Length	OD	Micron	No. / case
SF1-978	9-7/8”	2-1/2”	1	30
SF5-978	9-7/8”	2-1/2”	5	30
SF20-978	9-7/8”	2-1/2”	20	30
SF50-978	9-7/8”	2-1/2”	50	30
SF1-20	20”	2-1/2”	1	15
SF5-20	20”	2-1/2”	5	15
SF20-20	20”	2-1/2”	20	15
SF50-20	20”	2-1/2”	50	15
SF1-30	30”	2-1/2”	1	15
SF5-30	30”	2-1/2”	5	15
SF20-30	30”	2-1/2”	20	15
SF1-40	40”	2-1/2”	1	10
SF5-40	40”	2-1/2”	5	10
SF20-40	40”	2-1/2”	20	10

Full-Flow (BB) 4-1/2” OD cartridges

Product Number	Length	OD	Micron	No. / case
SF1-10-425	9-3/4”	4-1/2”	1	8
SF5-10-425	9-3/4”	4-1/2”	5	8
SF20-10-425	9-3/4”	4-1/2”	20	8
SF50-10-425	9-3/4”	4-1/2”	50	8
SF1-20-425	20”	4-1/2”	1	4
SF5-20-425	20”	4-1/2”	5	4
SF20-20-425	20”	4-1/2”	20	4
SF50-20-425	20”	4-1/2”	50	4

Wound cartridges with 304 stainless steel center tubes for temperatures to 200°F (93°C)

Product Number	Length	OD	Micron	No. / case
MS10FS5	9-7/8”	2-1/2”	5	30
MS10FS20	9-7/8”	2-1/2”	20	30
MS10FS50	9-7/8”	2-1/2”	50	30
MS20FS5	20”	2-1/2”	5	15
MS20FS20	20”	2-1/2”	20	15
MS30FS5	30”	2-1/2”	5	15
MS30FS20	30”	2-1/2”	20	15
MS40FS5	40”	2-1/2”	5	10
MS40FS20	40”	2-1/2”	20	10

Flow-Max® Phenolic Cellulose Cartridges

Ideal for high temperature industrial water and oil filtration.

Specifications

Maximum temperature	250°F (121°C)
Minimum temperature	-20°F (-29°C)
Maximum pressure	70 PSID (482 k PA)
Recommended change out	25 PSID (172 k PA)
End caps, cores, outer body	Electro plated tin
Media	Phenolic impregnated cellulose

Standard 2-1/2” OD x 9-3/4” length with electro tin plated outer body

Part Number	OD	Length	Micron	No. / case
FMPIC-5-975	2-1/2”	9-3/4”	5	30
FMPIC-20-975	2-1/2”	9-3/4”	20	30
FMPIC-50-975	2-1/2”	9-3/4”	50	30

Standard 2-1/2” OD x 20” length with electro tin plated outer body

Part Number	OD	Length	Micron	No. / case
FMPIC-5-20	2-1/2”	20”	5	15
FMPIC-20-20	2-1/2”	20”	20	15
FMPIC-50-20	2-1/2”	20”	50	15

Standard 2-1/2” OD x 30” length with electro tin plated outer body

Part Number	OD	Length	Micron	No. / case
FMPIC-5-30	2-1/2”	30”	5	12
FMPIC-20-30	2-1/2”	30”	20	12
FMPIC-50-30	2-1/2”	30”	50	12

Jumbo Model 40 (7-3/4” x 9-5/8”)

Part Number	OD	Length	Micron	No. / case
FMPIC-40-5-HT	7-3/4”	9-5/8”	5	1
FMPIC-40-20-HT	7-3/4”	9-5/8”	20	1
FMPIC-40-50-HT	7-3/4”	9-5/8”	50	1

Jumbo Model 90 (7-3/4” x 19-1/2”)

Part Number	OD	Length	Micron	No. / case
FMPIC-90-5-HT	7-3/4”	19-1/2”	5	1
FMPIC-90-20-HT	7-3/4”	19-1/2”	20	1
FMPIC-90-50-HT	7-3/4”	19-1/2”	50	1

Jumbo Model 170 (7-3/4” x 30-3/4”)

Part Number	OD	Length	Micron	No. / case
FMPIC-170-5-HT	7-3/4”	30-3/4”	5	1
FMPIC-170-20-HT	7-3/4”	30-3/4”	20	1
FMPIC-170-50-HT	7-3/4”	30-3/4”	50	1

Note: Phenolic impregnated cellulose cartridges are not to be used for potable water. Jumbo cartridges fit in Flow-Max jumbo housings only.

Stainless Steel Filter Cartridges

Pleated and cylindrical cartridges for high temperatures & aggressive chemicals.

Applications

- High temperatures
- High pressures
- Water
- Oil
- Solvents
- Aggressive chemicals

Specifications	Data
Maximum temperature	250°F (121°C)
Minimum temperature	-67°F
Maximum pressure	60 PSID
Recommended change out	30-40 PSID
Media, end caps, cores	304 stainless steel
Gaskets	Buna-A (other options available)

Types

Pleated cartridges for increased surface area, longer life and greater dirt holding capacity

Part Number	Type	OD	Material	Length	Micron	No. / case
FMSSCP-10-975	Pleated	2-3/4”	304	9-3/4”	10	1
FMSSCP-40-975	Pleated	2-3/4”	304	9-3/4”	40	1
FMSSCP-100-975	Pleated	2-3/4”	304	9-3/4”	100	1

Standard end gaskets are Buna-A. Viton and Teflon are available. Additional lengths are available.

Cylindrical Cartridges

Part Number	Type	OD	Material	Length	Micron	No. / case
FMSSCC-10-975	Cylindrical	2-3/4”	304	9-3/4”	10	1
FMSSCC-40-975	Cylindrical	2-3/4”	304	9-3/4”	40	1
FMSSCC-100-975	Cylindrical	2-3/4”	304	9-3/4”	100	1

Note: Standard end gaskets are Buna-N. Viton and Teflon are available. Additional lengths and micron rating are available.

Oil Reduction Cartridges

Removes oil, gasoline and other hydrocarbons from water in a single pass!

Hydrocarbon removal cartridges are engineered to remove oil, gasoline, diesel fuel, solvents, sheen, and other hydrocarbons from water in a single pass by permanently bonding them to our absorbent media, without significant pressure drop even when the cartridges have been fully saturated.

Applications

- Manhole effluent
- Storm runoff water
- Tank farms & terminals
- Bilge & ballast water
- Tramp oil removal from machining fluids
- Plating baths
- Parts washing
- Oil spill remediation projects

Specifications

Filter media	Melt blown polypropylene, infused with hydrocarbon absorbent material
Initial pressure drop	1.5 psid (at 5 GPM per 9-3/4” x 2-1/2” cartridge)
Capacity (per 9-3/4” x 2-1/2”)	200 grams, oil & grease
Capacity (per 9-3/4” x 4-1/2”)	900 grams, oil & grease
Maximum flow rate (per 9-3/4” x 2-1/2”)	5 GPM
Maximum flow rate (per 9-3/4” x 4-1/2”)	20 GPM
Micron rating (for sediment removal)	5 micron
Maximum temperature limit	140°F (60°F)

Part Numbers for 2-1/2” OD cartridges

Part Number	Length	OD	Micron rating	Number Per Case
FPHRC-975	9-3/4”	2-1/2”	5	12
FPHRC-20	20”	2-1/2”	5	20
FPHRC-30	30”	2-1/2”	5	20

Part Numbers for 4-1/2” OD cartridges

Part Number	Length	OD	Micron rating	Number Per Case
FPHRC-BB-975	9-3/4”	4-1/2”	5	12
FPHRC-BB-20	20”	4-1/2”	5	20

Note: All cartridges are packaged in protective, barrier bags to ensure top quality performance.

Section 7

Components

RO-PRO® Storage Tanks

Plastic and metal storage tanks for reverse osmosis systems.

High profile plastic tanks (only 9” wide)

Conventional metal tank

RO-PRO® plastic storage tanks . . .
The storage tank your customers prefer under their sink because it's only 9" wide!

Made using the highest food grade polypropylene, so they will never chip, dent or rust!

NSF®

ANSI / NSF Standard 58 CERTIFIED (White & Blue)

Features

- Only 9" in diameter (takes less space below sink).
- 100% polypropylene (will not chip, rust or dent).
- Diaphragm imparts no foul tastes or odors to water.
- Rated for pressures to 100 psi.
- NSF Standard 58 Certified (white and blue tanks).
- Five year limited warranty.

RO-PRO plastic storage tanks

Model Number	Volume (Gals.)	Diameter	Height	Color	Ship. Wt. (Lbs.)	No. / Case
ROPRO4-W	4	9"	20"	White	10	1
ROPRO4-K	4	9"	20"	Black	10	1
ROPRO4-B	4	9"	20"	Blue	10	1
PRO4000W	4	12"	14"	White	10	1

RO-PRO metal storage tanks

Model Number	Volume (Gals.)	Diameter	Height	Color	Ship. Wt. (Lbs.)	No. / Case
FRO-122-WH	3.2	11"	14"	White	10	1
FRO-132-WH	4	11"	14"	White	10	1
FRO-132-BL	4	11"	14"	Blue	10	1
FRO-1070-BL	14	15"	23"	Blue	24	1
FRO-1070-WH	14	15"	23"	White	24	1

Metal storage tanks

Model Number	Volume (Gals.)	Diameter	Height	Color	Ship. Wt. (Lbs.)	No. / Case
FWR60	20	16"	29"	Blue	36	1
FWR100	32	21"	28"	Blue	54	1
FWR200	44	21"	36"	Blue	67	1
FWR260	85	26"	45"	Blue	121	1
FWR360	119	26"	60"	Blue	153	1

Parts & fittings

Part Number	Description
CTS500	Stand to install 4 gal. tank, horizontally

Membrane Housings

Top quality membrane housings for residential RO systems.

EH2500W

EH2501W

EH2501KHCW

Flowmatic's membrane housings are manufactured from the highest quality NSF listed, FDA grade polypropylene, WQA validated.

Features

- Standard 1/8" NPT molded threads
- Models with John Guest® fittings
- High quality finish
- Burst pressure exceeds 500 psi
- Cycle test 150 psi, 150,000 cycles
- Choice of five housing styles to meet every requirement

EH2500W

EH2501W

Membrane housings

Part Number	Description	Size	Color	Fittings	No. / Case
EH2500W	Side, Side, Side	1/8"	White	None	25
EH2501W	Side, Side, Side	1/8"	White	None	25
EH2500KW	End, Side, Side	1/8"	White	None	25
EH2501KW	End, Side, Side	1/8"	White	None	25
EH2500KHCW	End, Side, Side	1/4"	White	J.G.	25
EH2501KHCW	End, Side, Side	1/4"	White	J.G.	25

O-rings

Part Number	Description	No. / Case
OR-2	O-ring for EH series housings	10

Mounting Clips

Polypropylene molded clips in six styles and colors.

C-2000W

C-2000B

C2500W

C2500B

DC2500W

DC2500B

C3000W

C3000B

Mounting clips

Part Number	Size	Color	Description	No. / Case
C-2000B	2”	Black	In-line	500
C-2000W	2”	White	In-line	500
C2500B	2-1/2”	Black	Single, membrane	300
C2500W	2-1/2”	White	Single, membrane	300
C3000B	--	Black	For shut-off valve	500
C3000W	--	White	For shut-off valve	500
DC2000W	2” x 2”	White	Double in-line	300
DC2500B	2-1/2” x2”	Black	Dual	300
DC2500W	2-1/2” x2”	White	Dual	300
DC3000W	2-1/2” x 2-1/2”	White	Double	300

Residential RO Membranes

Top quality membranes for residential reverse osmosis systems.

Watts® residential membranes (thin film composite)

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
W-1812-24	Tap water	1.8”	11.75”	24	25
W-1812-36	Tap water	1.8”	11.75”	36	25
W-1812-50	Tap water	1.8”	11.75”	50	25
W-1812-75	Tap water	1.8”	11.75”	75	25
W-1812-100	Tap water	1.8”	11.75”	100	25

Note: W-1812-100 membranes are packaged in preservative and should be kept in a cool environment if stored for a prolonged period of time.

Watts membrane specifications

Data	W-1812-24	W-1812-36	W-1812-50	W-1812-75	W-1812-100
Membrane type	TCF	TCF	TCF	TCF	TCF
Material	Polyamide	Polyamide	Polyamide	Polyamide	Polyamide
Charge	Negative	Negative	Negative	Negative	Negative
Configuration	Spiral-wound	Spiral-wound	Spiral-wound	Spiral-wound	Spiral-wound
Salt rejection	96%	96%	96%	96%	96%
Max. operating temp.	113˚F / 45˚C	113˚F / 45˚C	113˚F / 45˚C	113˚F / 45˚C	113˚F / 45˚C
Max. operating pressure	125 psi	125 psi	125 psi	125 psi	125 psi
Max. turbidity (NTU)	1	1	1	1	1
Max. SDI	5	5	5	5	5
pH range	3-10	3-10	3-10	3-10	3-10
Flux	24 gpd	36 gpd	50 gpd	75 gpd	100 gpd

Note: Specifications based on 77˚F (25˚) temperature and 60 psid pressure.

Filmtec® by Dow® residential membranes (thin film)

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
TW30-1812-24	Tap water	1.8”	11.75”	24	25
TW30-1812-36	Tap water	1.8”	11.75”	36	25
TW30-1812-50	Tap water	1.8”	11.75”	50	25
TW30-1812-75	Tap water	1.8”	11.75”	75	25
CTA-16	Desal chlorine tolorent		11.25”	16	25

Genuine John Guest® Fittings

Quick connect fittings to reduce labor costs and provide quality assurance.

John Guest® male connectors (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI010821S	1/4"	1/8"	-	500
PI010822S	1/4"	1/4"	-	400
PI010823S	1/4"	3/8"	-	300
PI011221S	3/8"	1/8"	-	250
PI011222S	3/8"	1/4"	-	250
PI011223S	3/8"	3/8"	-	200
PI011224S	3/8"	1/2"	-	150
PI011623S	1/2"	3/8"	-	150
PI011624S	1/2"	1/2"	-	150

John Guest® union tees (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI0208S	1/4"	-	-	300
PI0212S	3/8"	-	-	100
PI0216S	1/2"	-	-	50

John Guest® union elbows (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI0308S	1/4"	-	-	400
PI0312S	3/8"	-	-	200
PI0316S	1/2"	-	-	100

John Guest® union connectors (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI0408S	1/4"	-	-	500
PI0412S	3/8"	-	-	200
PI0416S	1/2"	-	-	100

John Guest® stem adapters (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI050821S	1/4"	1/8"	1/4" stem	500
PI050822S	1/4"	1/4"	1/4" stem	500
PI051222S	1/4"	1/4"	3/8" stem	300
PI051223S	1/4"	3/8"	3/8" stem	300
PI051623S	1/4"	3/8"	1/2" stem	150
PI051624S	1/4"	1/2"	1/2" stem	150

Note: Fittings packaged 10 per poly bag.

Genuine John Guest® Fittings

Quick connect fittings to reduce labor costs and provide quality assurance.

John Guest® reducers (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI061208S	1/4"	-	3/8" stem	400
PI061612S	3/8"	-	1/2" stem	250
PI061008S	5/16"	-	1/4" stem	500
PI061210S	5/16"	-	3/8" stem	400

John Guest® plugs (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI0808S	-	-	1/4" stem	500
PI0812S	-	-	3/8" stem	400
PI0816S	-	-	1/2" stem	300

John Guest® reducing unions (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI201008S	1/4"	-	5/16" tube	200
PI201208S	3/8"	-	1/4" tube	200
PI201210S	3/8"	-	5/16" tube	200
PI201612S	1/2"	-	3/8" tube	100

John Guest® reducing elbows (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI211008S	1/4"	-	5/16" tube	200
PI211208S	3/8"	-	1/4" tube	200
PI211612S	1/2"	-	3/8" tube	100

John Guest® plug-in elbows (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI220808S	1/4"	-	1/4" stem	500
PI221208S	1/4"	-	3/8" stem	300
PI221212S	3/8"	-	3/8" stem	200
PI221616S	1/2"	-	1/2" stem	100

John Guest® reducing branch tees (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI301208S	3/8" x 2	-	1/4" tube	150
PI301612S	1/2" x 2	-	3/8" tube	50

Note: Fittings packaged 10 per poly bag.

Genuine John Guest® Fittings

Quick connect fittings to reduce labor costs and provide quality assurance.

John Guest® faucet connectors (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
CI3208U7S	1/4”	7/16”	-	250
CI3212U7S	3/8”	7/16”	-	250

John Guest® NPTF female adapters (gray)

Part Number	Tube Size	Thread Size	Other	No. / Case
PI450822S	1/4”	1/4”	-	400
PI451222S	3/8”	1/4”	-	250

John Guest® end stops (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI4608S	1/4”	-	-	500
PI4612S	3/8”	-	-	500

John Guest® NPTF fixed elbows (gray)

Part Number	Tube	Thread Size	Other Size	No. / Case
PI480821S	1/4”	1/8”	-	500
PI480822S	1/4”	1/4”	-	400
PI480823S	1/4”	3/8”	-	400
PI481222S	3/8”	1/4”	-	200
PI481223S	3/8”	3/8”	-	200

John Guest® bulkhead unions (gray)

Part Number	Size	No. / Case
PI1208S	1/4”	200
PI1212S	3/8”	100
PI1216S	1/2”	50

John Guest® Miscellaneous

Part Number	Size	No. / Case
PI2312S	3/8” Two way divider	100
PI4712S	3/8” Cross	100
PI491612S	1/2” x 3/8” Threeway divider	100
1/4SCV	Single check valve, 1/4” tubing	80
3/8SCV	Single check valve, 3/8” tubing	80
TSPITOOL	Release tool set, 1/4” & 3/8”	50
PIC1808R	Locking clip, red, 1.4”	1,000
PIC1812R	Locking clip, red, 3/8”	1,000

Note: Fittings packaged 10 per poly bag

Genuine John Guest® Fittings

Quick connect fittings to reduce labor costs and provide quality assurance.

Male connector

Union tee

Union elbow

Union connector

Stem adapter

Reducer

Plug-in elbow

Fixed elbow

John Guest brand fittings (white)

Part Number	Description	Tube	Other	Thread Size	No. / Case
CI010821W	Male connector	1/4”	-	1/8”	500
CI010822W	Male connector	1/4”	-	1/4”	400
CI010823W	Male connector	1/4”	-	3/8”	300
CI011222W	Male connector	3/8”	-	1/4”	250
CI0208W	Union tee	1/4”	-	-	300
CI0212W	Union tee	3/8”	-	-	100
CI0308W	Union elbow	1/4”	-	-	400
CI0312W	Union elbow	3/8”	-	-	200
CI0408W	Union connector	1/4”	-	-	400
CI0412W	Union connector	3/8”	-	-	200
CI050821W	Stem adapter	-	1/8” Stem	1/4”	500
CI050822W	Stem adapter	-	1/4” Stem	1/4”	500
CI051222W	Stem adapter	-	3/8” Stem	1/4”	300
CI051223W	Stem adapter	-	3/8” Stem	3/8”	300
CI061208W	Reducer	1/4”	3/8” Stem	-	400
CI220808W	Plug-in elbow	1/4”	1/4” Stem	-	500
CI221208W	Plug-in elbow	1/4”	3/8” Stem	-	300
CI221212W	Plug-in elbow	3/8”	3/8” Stem	-	200
CI480821W	Fixed elbow	1/4”	-	1/8”	500
CI480822W	Fixed elbow	1/4”	-	1/4”	400
CI480823W	Fixed elbow	1/4”	-	3/8”	400
CI481222W	Fixed elbow	3/8”	-	1/4”	200

Note: Fittinngs packaged 10 per poly bag.

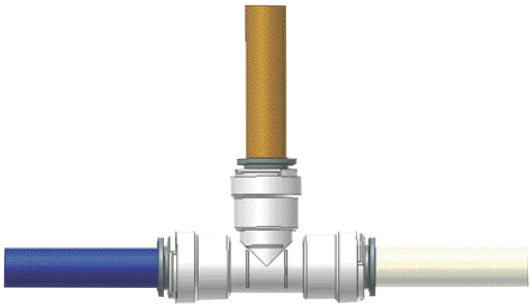
Sea Tech® Fittings

Quick connect fittings for Copper, CPVC, PEX, LDPE, MDPE & HDPE tubing.

Sea Tech fittings provide reliable, cost effective solutions for water connections using Copper, CPVC, PEX, LDPE, MDPE & HDPE tubing, up to 3/4" in size (CTS). Sea Tech fittings are produced from FDA approved materials and for potable water applications, and they use stainless steel teeth for corrosive environments. Sea Tech fittings are not recommended for explosive gases, fuels or petroleum products.

Technical information & specifications

Series 35	High performance thermal plastic (FDA approved & ANSI/NSF-61 Certified.) Off white.
Metric Series	Thermal plastic (FDA approved & ANSI/NSF-61 Certified.) Black
O-rings	EPDM
Working pressure (35)	100 psi @ 180˚F; 250 psi 75˚F
Temperature	180°F (82°C) maximum @ 100 psi
Certifications	ISO 9001; ASTM F877; ANSI/NSF-14 and 61 certified;FDA approved material



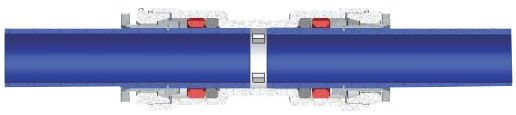
Connect to multiple materials!

The Sea Tech fittings incorporate stainless steel gripping teeth in its collet. These corrosion resistant teeth allow Sea Tech connectors to interconnect witth multiple materials without the need for special tools, or tube inserts.

- Copper
- CPVC
- PEX, LDPE, MDPE, & HDPE tubing

Fittings rotate under pressure!

After a joint is made the tubing can still swivel while connected, even under maximum pressure. The ability to rotate under pressure makes the connectors ideal for vibrating and dynamic applications.



Highest flow!

Sea Tech connectors join the tubing on the outside because there is no barb fitting on the inside of the tubing the flow capacity is increased by more than 30%. Only Sea Tech connectors offer complete flow, allowing for a more efficient system.

Create mini-manifolds!

With Sea Tech fittings small lengths of tubing can be eliminated by using our stackable connector configurations. Simply snap together Tees and/or Elbows to create a mini-manifold of fittings. Because Sea Tech connectors rotate the direction of the tubing can be oriented by a simple twist, reducing the amount of tubing required to plumb a water system.

Sea Tech® Fittings

Union Tees

Part Number	Tube Size	Per Box
F3523-10	1/2" CTS	50
F3523-14	3/4" CTS	50
F1123-1515	15mm	50
F1623-222	22mm	20

Stackable tees

Part Number	Tube Size	Per Box
F3533-10	1/2" CTS	50
F3533-14	3/4" CTS	20
F1133-1515	15mm	50

Stackable branch tee

Part Number	Tube Size	Per Box
F3534-10	1/2" CTS	50

Reducing Stackable tee

Part Number	Tube Size	Per Box
F3533-1004	1/2" CTS x 1/4"OD	50

Male thread tee

Part Number	Tube Size	Per Box
F3530-1008	1/2" CTS x 1/2" NPT	60

Reducing tee

Part Number	Tube Size	Per Box
F3524-1004	1/2" CTS x 1/4" OD	50
F3524-1410	3/4" CTS x 1/2" CTS	30
F1124-0415	15mm x 1/4" OD	50
F1624-222215	22mm x 15mm	30

Female swivel tee

Part Number	Tube Size	Per Box
F1125-0815	15mm	50

Union Elbow

Part Number	Tube Size	Per Box
F3517-10	1/2" CTS	80
F3517-14	3/4" CTS	40
F3517-18	1" CTS	40
F1117 -1515	15mm	80
F1617-2222	22mm	40

Sea Tech® Fittings

Stackable elbow

Part Number	Tube Size	Per Box
F3518-10	1/2" CTS	100
F3518-14	3/4" CTS	50
F1118 -1515	15mm	100
F1618-222	22mm	50

Drop ear elbow

Part Number	Tube Size	Per Box
F3521-1008	1/2" CTS x 1/2”NPT	80

Union Connector

Part Number	Tube Size	Per Box
F3515-10	1/2" CTS	90
F3515-14	3/4" CTS	40
F3515-18	1" CTS	40
F1115 -1515	15mm	90
F1615-2222	22mm	40

Reducing union

Part Number	Tube Size	Per Box
F3516-1004	1/2" CTS x 1/4” OD	90
F1115 -0415	15mm x 1/4” OD	90
F1116 -1015	15mm x 1/2” OD	100

Female connector

Part Number	Tube Size	Per Box
F3510-1008	1/2" CTS x 1/2" NPS	100
F3510-1012	1/2" CTS x 3/4” NPS	80
F3510-1013	1/2" CTS x 3/4" CLOSET	90
F3510-1014	1/2" CTS x 3/4" FGHT	80
F3510-1012	3/4” CTS x 1/2” NPS	60
F1110 -0815	15mm x 1/2” NPS	100
F1110 -1215	15mm x 3/4” NPS	80
F2609-1215	15mm x 3/4” FGHT	80
F1607-1222	22mm x 3/4” BSP	70

Female connector elbow

Part Number	Tube Size	Per Box
F3520-1008	1/2" CTS x 1/2" NPS	80
F3520-1012	1/2" CTS x 3/4" NPS	60
F3520-1013	1/2" CTS x 3/4" CLOSET	70
F3520-1014	1/2" CTS x 3/4" FGHT	70
F1120-0815	15mm x 1/2” NPS	80
F1120-1215	15mm x 3/4” NPS	60
F1120-1415	15mm x 3/4” FGHT	70

Flange mounted elbow

Part Number	Tube Size	Per Box
F1168-0815	15mm	60

Sea Tech® Fittings

Reducing stem

Part Number	Tube Size	Per Box
F3514-1410	3/4” CTS x 1/2" CTS	100
F3514-1810	1” CTS x 1/2" CTS	70
F3514-1814	1” CTS x 3/4" CTS	40
F1614-1522	15mm x 22mm	100
F2114-2228	22mm x 28mm	50

Male elbow

Part Number	Tube Size	Per Box
F3519-1008	1/2" tube x 1/2" NPT	100
F1119 -0815	15mm x 1/2" NPT	100

Male connector

Part Number	Tube Size	Per Box
F3501-1008	1/2" CTS x 1/2" NPT	150
F3501-1012	1/2" CTS x 3/4" NPT	100
F3501-1014	1/2" CTS x 3/4" MGHT	100
F3501-1412	3/4" CTS x 3/4" NPT	40
FF1201-0815 (Brass)	15mm x 1/2" NPT	50
F1701-1222 (Brass)	22mm x 3/4" NPT	20

Compression connector

Part Number	Tube Size	Per Box
F1212-0615	15mm x 3/8”	50
F1211-0615	15mm	50

Union pump fitting

Part Number	Tube Size	Per Box
F3575-10	1/2" CTS	120

Elbow pump fitting

Part Number	Tube Size	Per Box
F3576-10	1/2" CTS	100
F2476-15	15mm	100

Female stem (brass)

Part Number	Tube Size	Per Box
F1226-0415	15mm x 1/4"NPT	100
F1226-0615	15mm x 3/8"NPT	100
F1226-0815	15mm x 1/2"NPT	50
F1726-1222	22mm x 3/4"NPT	50
F1726-1622	22mm x 1"NPT	20

Male stem (brass)

Part Number	Tube Size	Per Box
F1229-0415	15mm x 1/4"NPT	100
F1229-0615	15mm x 3/8"NPT	100
F1229-0815	15mm x 1/2"NPT	50
F1729-1222	22mm x 3/4"NPT	50
F1729-1622	22mm x 1"NPT	20

Sea Tech® Fittings

Hose barb fitting

Part Number	Tube Size	Per Box
F3513-1008	1/2" tube x 1/2" barb	130
F1413-0615	15mm x 3/8” barb	60
F2913-1222	22mm x 3/4” barb	70

Stop valve

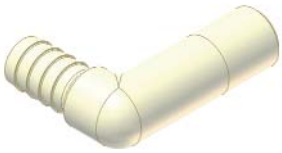
Part Number	Tube Size	Per Box
F3539-10	1/2" CTS	40
F2939-2222	22mm	10

Stackable hose barb union

Part Number	Tube Size	Per Box
F3511-1008	1/2" CTS x 1/2” barb	200

Reducing stop valve

Part Number	Tube Size	Per Box
F3539-1004	1/2" CTS x 1/4" OD	40



Stackable hose barb elbow

Part Number	Tube Size	Per Box
F3512-1008	1/2" CTS x 1/2" barb	200

Stackable valve

Part Number	Tube Size	Per Box
F3543-10	1/2" CTS	40

End stop

Part Number	Tube Size	Per Box
F3545-10	1/2" CTS	200
F3545-18	1" CTS	50
F1145-15	15mm	200
F1645-22	22mm	90

Reducing stackable valve

Part Number	Tube Size	Per Box
F3543-1004	1/2" CTS x 1/4" OD	40

Sea Tech® Fittings

3 way selector valve

Part Number	Tube Size	Per Box
F3538-10	1/2" CTS	20

Union check valve

Part Number	Tube Size	Per Box
F3540-10	1/2" CTS	90

3 way by-pass valve

Part Number	Tube Size	Per Box
F3541-10	1/2" CTS	20

Male stem check valve

Part Number	Tube Size	Per Box
F1235-0815	15mm x 1/2” NPT	50

End plug

Part Number	Tube Size	Per Box
F1146-15	15mm	250
F1646-22	22mm	160

Stem check valve (brass)

Part Number	Tube Size	Per Box
F1237-15	15mm	50

Tee valve

Part Number	Tube Size	Per Box
F2440-0415	15mm x 1.4” OD	20

Temperature mixing valve

Part Number	Tube Size	Per Box
F12142-08	1/2" NPT	Each

Sea Tech® Fittings

Pipe clip

Part Number	Tube Size	Per Box
F2370-1557	1/2” CTS	300
F2370-2257	22mm	150
F2370-2857	28mm	80

Elbow clip

Part Number	Tube Size	Per Box
F2349-15	1/2” CTS	400
F2349-22	22mm	200
F2349-28	28mm	100

Collet clip

Part Number	Tube Size	Per Box
F3547-10	1/2" CTS	2500
F3547-14	3/4" CTS	2000
F1147-15	15mm	2500
F1147-22	22mm	2000

O-ring assembly

Part Number	Tube Size	Per Box
F159-35	1/2" CTS	500
F159-35-14	3/4" CTS	250
F159-24	1/2" CTS	500
F159-15	15mm	500
F159-22	22mm	250

Cone seal

Part Number	Tube Size	Per Box
F161-08	1/2" NPS	1000
F161-12	3/4" NPS & FGHT	1000

Mini union tee (poly tubing)

Part Number	Tube Size	Per Box
F4023-0404	1/4" O.D.	1

Collet cover

Part Number	Color	Tube Size	Per Box
F2154-15	Red	15mm	500
F2155-15	White	15mm	500
F2156-15	Blue	15mm	500
F2157-15	Black	15mm	500
F2954-22	Red	22mm	250
F2955-22	White	22mm	250
F2956-22	Blue	22mm	250

Jaco® Brand Compression Fittings

With molded in-tube sleeve, made from FDA grade, NSF listed Nylon.

Jaco® brand male connectors (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F10-4-2-N-0	1/4”	1/8”	White	100
F10-4-4-N-0	1/4”	1/4”	White	100
F10-4-6-N-0	1/4”	3/8”	White	100
F10-6-4-N-0	3/8”	1/8”	White	100
F10-6-6-N-0	3/8”	3/8”	White	100
F10-6-8-N-0	3/8”	1/2”	White	100
F10-8-8-N-0	1/2”	1/2”	White	100
F10-8-8-N-PG*	1/2”	1/2”	White	100
F10-12-12-N-PG*	3/4”	3/4”	White	100

Note: *With gripper hold tubing under higher pressure.

Jaco® brand union connectors (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F15-4-N-0	1/4”	-	White	300
F15-6-N-0	3/8”	-	White	100

Jaco® brand union connectors (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F15-6-4-N-0	1/4” X 3/8”	-	White	100

Jaco® brand female connectors (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F25-4-2-N-0	1/4”	1/8”	White	100
F25-4-4-N-0	1/4”	1/4”	White	100
F25-4-4-N-0-BLACK	1/4”	3/8”	Black	100
F25-6-4-N-0	3/8”	1/4”	White	100
F25-6-6-N-0	3/8”	3/8”	White	100
F25-6-8-N-0	3/8”	1/2”	White	100
F25-8-8-N-0	1/2”	1/2”	White	100
F25-8-8-N-PG*	1/2”	1/2”	White	100

Note: *With gripper hold tubing under higher pressure.

Jaco® brand male elbows (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F40-4-2-N-0	1/4”	1/8”	White	100
F40-4-4-N-0	1/4”	1/4”	White	100
F40-4-6-N-0	1/4”	3/8”	White	100
F40-6-4-N-0	3/8”	1/4”	White	100
F40-6-6-N-0	3/8”	3/8”	White	100
F40-8-6-N-0	1/2”	3/8”	White	100
F40-8-8-N-PG*	1/2”	1/2”	White	100

Note: *With gripper hold tubing under higher pressure.

Jaco® Brand Compression Fittings

With molded in-tube sleeve, made from FDA grade, NSF listed Nylon.

Jaco® brand female elbows (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F45-4-2-N-0	1/4”	1/8”	White	100
F45-4-4-N-0	1/4”	1/4”	White	100
F45-6-4-N-0	3/8”	1/4”	White	100
F45-6-6-N-0	3/8”	3/8”	White	100
F45-8-8-N-0	1/2”	1/2”	White	100

Jaco® brand union elbows (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F50-4-N-0	1/4”	-	White	100
F50-6-N-0	3/8”	-	White	100
F50-8-N-0	1/2”	-	White	100
F50-8-N-PG*	1/2”	-	White	100

Note: *With gripper hold tubing under higher pressure.

Jaco® brand branch tees (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F60-4-2-N-0	1/4”	1/8”	White	100
F60-4-4-N-0	1/4”	1/4”	White	100
F60-6-4-N-0	3/8”	1/8”	White	100
F60-6-6-N-0	3/8”	3/8”	White	100

Jaco® brand union tees (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F70-4-N-0	1/4”	-	White	100
F70-6-N-0	3/8”	-	White	100
F70-8-N-0	1/2”	-	White	100
F70-8-N-PG*	1/2”	-	White	100

Note: *With gripper hold tubing under higher pressure.

Jaco® brand male run tees (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
F75-4-2-N-0	1/4”	1/8”	White	100
F75-4-4-N-0	1/4”	1/4”	White	100
F75-6-4-N-0	3/8”	1/8”	White	100
F75-6-6-N-0	3/8”	3/8”	White	100

Jaco® brand compression nuts (nylon)

Part Number	Tube Size	Thread Size	Color	No. / Case
N-0-4W	1/4”	-	White	100
N-0-4BLK	1/4”	-	Black	100
N-0-6W	3/8”	-	White	100
N-0-6BLK	3/8”	-	Black	100

Tube inserts (nylon)

Part Number	Description	Color	No. / Case
INS-14	Tube inserts for 1.4” tube	White	100
INS-38	Tube inserts for 3.8” tube	White	100

Flowmatic® Brand Ball Valves

Made using FDA grade polypropylene with o-ring seals & molded-in ball design.

BV250B

BV9014WHC

BV250W

BV9014W

BV9014B

Flowmatic ball valves

Part Number	Description	Fitting	Color	Size	No. / Case
BV250W	Straight	JACO	White	1/4”	400
BV250B	Straight	JACO	Black	1/4”	400
BV9014W	Elbow	JACO	White	1/4”	500
BV9014B	Elbow	JACO	Black	1/4”	500
BV9014W-HC	Elbow	J. Guest	White	1/4”	500
BV9038W	Elbow	JACO	White	3/8”	50

John Guest brand shut-off valve

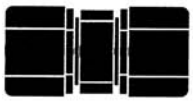
Part Number	Description	No. / Case
PPSV010822W	1/4” x 1/4” Male NPTF straight valve	200
PPSV011223W	3/8” x 3/8” Male NPTF straight valve	100
PPSV040808W	1/4” x 1/4” Straight valve	200
PPSV041212W	3/8” x 3/8” Straight valve	100
PPSV500822W	1/4” x 1/4” Female NPTF elbow valve	200
PPSV501222W	3/8” x 1/4” Female NPTF elbow valve	1
PPASV121208W	Angle strap, 3/8”, 3/8”, 1/4”	1
PPASV121212W	Angle strap, 3/8”, 3/8”, 3/8”	1

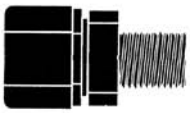
John Guest misc parts & fittings

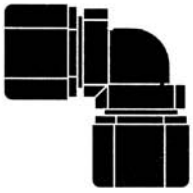
Part Number	Description	No. / Case
PI2808S	1/4” Plastic half cart. grey body, grey collet	1000
PI2808W	1/4” Plastic half cart. white body, white collet	1000
PI2812S	3/8” Plastic half cart. grey body, grey collet	1000
PI2812W	3/8” Plastic half cart. white body, white collet	1000
CP-R081-S	1/4” O-ring	5000
CP-R121-S	3/8” O-ring	5000
CP-R161-S	1/2” O-ring	3000

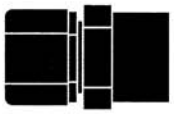
Parker FAST AND TITE® Fittings

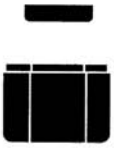
Part Number	Model	Connection (O.D. x Thread)
Union Connectors		
I4301	P4UC4	1/4" x 1/4"
I4303	P6UC6	3/8” x 3/8”
I4304	P8UC8	1/2" x 1/2"
I4305	P10UC10	5/8” x 5/8”
I4307	P6UC4	3/8” x 1/4"
I4308	P6UC5	3/8” x 5/16”
I4309	P8UC6	1/2" x 3/8”
I4310	P10UC6	5/8” x 3/8”
I4311	P10UC8	5/8” x 1/2"
Female Connectors		
I4335	P4FC2	1/4" x 1/8”
I4336	P4FC4	1/4" x 1/4"
I4337	P6FC4	3/8” x 1/4"
I4338	P6FC6	3/8” x 3/8”
I4339	P6FC8	3/8” x 1/2"
I4340	P8FC6	1/2" x 3/8”
I4341	P8FC8	1/2" x 1/2"
I4342	P10FC8	5/8” x 1/2"
Bulkhead Union		
I4312	P4BU4	1/4" x 1/4"
I4314	P6BU6	3/8” x 3/8”
I4315	P8BU8	1/2" x 1/2"
Male Connector		
I4316	P4MC2	1/4” x 1/8”
I4317	P4MC4	1/4" x 1/4"
I4320	P6MC2	3/8” x 1/8”
I4321	P6MC4	3/8” x 1/4"
I4322	P6MC6	3/8” x 3/8”
I4323	P6MC8	3/8” x 1/2"
I4324	P6MC12	3/8” x 3/4”
I4327	P8MC6	1/2” x 3/8”
I4328	P8MC8	1/2" x 1/2"
I4329	P8MC12	1/2” x 3/4”
I4331	P10MC4	5/8” x 1/4”
I4332	P10MC6	5/8” x 3/8”
I4333	P10MC8	5/8” x 1/2”
I4334	P10MC12	5/8” x 3/4”
Elbow Union		
I4364	P4EU4	1/4" x 1/4"
I4366	P6EU6	3/8” x 3/8”
I4367	P8EU8	1/2" x 1/2"
I4368	P10EU	10 5/8” x 5/8”
I4370	P6EU	4 3/8” x 1/4"
I4371	P6EU5	3/8” x 5/16"
I4372	P8EU6	1/2” x 3/8"
Male Branch Tee		
I4380	P4MT2	1/4” x 1/8”
I4381	P4MT4	1/4" x 1/4"
I4384	P6MT4	3/8” x 1/4”
I4385	P6MT6	3/8” x 3/8”
I4386	P8MT6	1/2" x 3/8”
I4387	P8MT8	1/2" x 1/2"
I4388	P10MT8	5/8” x 1/2”

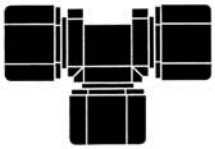












Part Number	Model	Connection (O.D. x Thread)
Male Elbows		
I4343	P4ME2	1/4" x 1/8”
I4344	P4ME4	1/4" x 1/4"
I4345	P4ME6	1/4" x 3/8”
I4349	P6ME4	3/8" x 1/4”
I4350	P6ME6	3/8” x 3/8”
I4351	P6ME8	3/8" x 1/2”
I4352	P6ME12	3/8" x 3/4”
I4353	P8ME6	1/2" x 3/8"
I4354	P8ME8	1/2" x 1/2"
I4355	P10ME8	5/8" x 1/2”
Female Elbows		
I4356	P4FE2	1/4” x 1/8"
I4357	P4FE4	1/4" x 1/4"
I4359	P6FE4	3/8” x 1/4”
I4360	P6FE6	3/8” x 3/8””
I4361	P8FE6	1/2” x 3/8”
I4362	P8FE8	1/2" x 1/2"
I4363	P10FE8	5/8” x 1/2"
Union Tees		
I4373	P4TU4	1/4" x 1/4"
I4375	P6TU6	3/8” x 3/8”
I4376	P8TU6	1/2” x 3/8”
I4377	P8TU8	1/2" x 1/2"
I4378	P10TU6	5/8” x 3/8”
I4379	P10TU10	5/8” x 5/8”
Male Run Tee		
I4389	P4MR2	1/4" x 1/8”
I4390	P6MR4	3/8” x 1/4”
I4392	P10MR8	5/8” x 1/2”
Grab Ring		
I4406	4GR1/4"	metal GR
I4406-P	4GRP	1/4" plastic GR
I4408	6GR3/8"	metal GR
I4408-P	6GRP	3/8" plastic GR
I4409	8GR1/2"	metal GR
I4409-P	8GRP	1/2" plastic GR
Nut & Spacer		
I4402	P4NS	1/4" nut & spacr
I4404	P6NS	3/8" nut & spacr
I4405	P8NS	1/2" nut & spacr
O-ring		
I4410	4-OR	1/4" o-ring
I4412	6-OR 3/8"	o-ring
I4413	8-OR 1/2"	o-ring

All components in fittings meet FDA and NSF requirements for food contact and potable water. FAST AND TITE® standard design is for thermoplastic tubing. When using clear vinyl tubing or urethane tubing, it is necessary to use a tube support.

Flowmatic® Brand Tubing

Flowmatic brand tubing

Part Number	Size	Length	Color	No. / Case
FMPE-14-W-500	1/4”	500 (ft)	White	1
FMPE-14-N-500	1/4”	500 (ft)	Natural	1
FMPE-14-B-500	1/4”	500 (ft)	Black	1
FMPE-14-L-500	1/4”	500 (ft)	Blue	1
FMPE-38-W-250	3/8”	250 (ft)	White	1
FMPE-38-N-250	3/8”	250 (ft)	Natural	1
FMPE-38-B-250	3/8”	250 (ft)	Black	1
FMPE-38-L-250	3/8”	250 (ft)	Blue	1
FMPE-14-W-100	1/4”	100 (ft)	White	1
FMPE-14-N-100	1/4”	100 (ft)	Natural	1
FMPE-14-B-100	1/4”	100 (ft)	Black	1
FMPE-14-L-100	1/4”	100 (ft)	Blue	1

Miscellaneous parts and fittings

Part Number	Description	No. Per Case
INS14	Tube insert for 1/4” OD tubing	100
INS38	Tube insert for 3/8” OD tubing	100
SL14	Tube sleeve for 1/4” OD tubing	100
SL38	Tube sleeve for 3/8” OD tubing	100
NP1400	SCH. 80 PVC close nipple for 1/4” MNPT x close	10
NP1415	SCH. 80 PVC nipple for 1/4” MNPT x 1-1/2”	10
NP1425	SCH. 80 PVC nipple for 1/4” MNPT x 2-1/2”	10
NP3815	SCH. 80 PVC nipple for 3/8” MNPT x 1-1/2”	10
NP1225	SCH. 80 PVC nipple for 1/2” MNPT x 2-1/2”	10
NP3425	SCH. 80 PVC nipple for 3/4” MNPT x 2-1/2”	10
NP1030	SCH. 80 PVC nipple for 1” MNPT x 3”	10

John Guest® Tubing

Top-of-the-line tubing for customers who demand the best!

John Guest tubing

Part Number	Size	Length	Color	No. / Case
PE-08-BI-0500FN	1/4”	500 (ft)	Natural	2
PE-08-BI-0500FW	1/4”	500 (ft)	White	2
PE-08-BI-0500FE	1/4”	500 (ft)	Black	2
PE-08-BI-0500FB	1/4”	500 (ft)	Blue	2
PE-08-BI-0500FR	1/4”	500 (ft)	Red	2
PE-08-BI-0500FO	1/4”	500 (ft)	Orange	2
PE-08-BI-0500FG	1/4”	500 (ft)	Green	2
PE-08-BI-0500FY	1/4”	500 (ft)	Yellow	2
PE-08-BI-1000FN	1/4”	1000 (ft)	Natural	1
PE-08-BI-1000FW	1/4”	1000 (ft)	White	1
PE-08-BI-1000FE	1/4”	1000 (ft)	Black	1
PE-08-BI-1000FB	1/4”	1000 (ft)	Blue	1
PE-08-BI-1000FR	1/4”	1000 (ft)	Red	1
PE-08-BI-1000FO	1/4”	1000 (ft)	Orange	1
PE-08-BI-1000FG	1/4”	1000 (ft)	Green	1
PE-08-BI-1000FY	1/4”	1000 (ft)	Yellow	1
PE-10-CI-0500FB	5/16”	500 (ft)	Blue	2
PE-12-EI-0500FN	3/8”	500 (ft)	Natural	1
PE-12-EI-0500FW	3/8”	500 (ft)	White	1
PE-12-EI-0500FE	3/8”	500 (ft)	Black	1
PE-12-EI-0500FB	3/8”	500 (ft)	Blue	1
PE-12-EI-0500FR	3/8”	500 (ft)	Red	1
PE-12-EI-0500FO	3/8”	500 (ft)	Orange	1
PE-12-EI-0500FG	3/8”	500 (ft)	Green	1
PE-12-EI-0500FY	3/8”	500 (ft)	Yellow	1
PE-16-GI-0250FE	1/2”	250 (ft)	Black	1
PE-16-GI-0250FN	1/2”	250 (ft)	Natural	1

Miscellaneous

Part Number	Description	No. Per Case
TSNIP	Tube cutter	1
BLADES	Replacement blades	1

Flowmatic® Brand Automatic Shut-Off Valves

The original "dual diaphragm" design, with lifetime warranty!

The original *dual diaphragm* design of Flowmatic's WQA validated valves provide automatic shut-off to supply line when storage tank reaches 65% of inlet pressure, to potentially save thousands of gallons of water per year. Valves are made using FDA grade, NSF certified materials in choice of models and colors. Comes with a lifetime warranty!

Flowmatic brand shut-off valves

Part Number	Size	Fittings	Color	No. / Case
S2000W	1/8"	Jaco	White	100
S2000B	1/8"	Jaco	Black	100
S2000HCW	1/4"	John Guest	White	40
S2000HCB	1/4"	John Guest	Black	40
S3000W	1/4"	Jaco	White	100
S3000B	1/4"	Jaco	Black	100
S3000HCW	1/4"	John Guest	White	50
S3000HCB	1/4"	John Guest	Black	50

Replacement Diaphragms*

Part Number	Description	No. / Case
DPG3000A	Upper Diaphragm (S2000, 3000)	200
DPG3000B	Lower Diaphragm (S2000, 3000)	100

*Prior purchase required

Waterminders®

Valves provide automatic shut-off, based on gallons filtered.

These unique, patented meter valves provide automatic shut off of a potable water system for filter replacement after a pre-determined quantity of water has been filtered.

Features

- Choice of 1,800 or 3,800 gallon capacity
- Settings in 100 gallon increments
- Accuracy within 10% of setting
- Operating pressures from 15 to 125 psi
- Burst tested to 500 psi
- Assortment of fittings
- Manufactured using NSF listed materials
- Models for gallons or liters

Part Number	Capacity	Fittings	Color	Size	No. / Case
WM2000B	1800 (gals.)*	Jaco	Black	1/4" MNPT	60
WM2000W	1800 (gals.)*	Jaco	White	1/4" MNPT	60
WM3000B	3800 (gals.)*	Jaco	Black	1/4" MNPT	60
WM3000W	3800 (gals.)*	Jaco	White	1/4" MNPT	60
WM3001B	15000 (ltrs.)*	Jaco	Black	1/4" MNPT	60
WM2001B	7000 (ltrs.)*	Jaco	Black	1/4" MNPT	60
WM2000HCW	1800 (gals.)*	J. Guest	White	1/4"	60
WM2000HCB	1800 (gals.)*	J. Guest	Black	1/4"	60

Note: * With dial which may be adjusted in increments of 100 gallons.

Booster, Transfer & Variable Speed Pumps

Self priming diaphragm pumps for a wide range of applications.

To boost pressure and increase performance for residential reverse osmosis systems.

Features

- Fully adjustable outlet pressure control
- Automatic regulation of outlet pressure
- Anti-vibration base plate
- Quiet operation

Booster pumps

Part Number	Transformer	Electrical (Volts)	Fittings	Outlet Pressure	Ship Weight	No. / Case
CDP-6800	Required	115	1/4” J.G.	Adjustable	9 (Lbs)	1
CDP-8800	Required	115	3/8” J.G.	Adjustable	9 (Lbs)	1

Note: Pumps listed above require transformer and pressure switch. (See next page)

Transfer/delivery pumps

Part Number	Flow Range (GPM)	Electrical (Volts)	Fittings	Shut-Off Pressure	Ship Weight	No. / Case
5852-7F12-J604	To 1.4	115*	3/8” J.G.	70 psi	9 (lbs)	1
5852-1E13-J574	To 0.6	115*	3/8” J.G.	70 psi	9 (lbs)	1

Note: *Comes with power cord.

Variable speed pumps (multiple location water transfer, varying psi)

Part Number	Flow Range (GPM)	Electrical (Volts)	Fittings	Shut-Off Pressure	Ship Weight	No. / Case
5853-GB12-V81D	0-1.3	115*	3/8” J.G.	40 psi	9 (lbs)	1
5853-GE12-V81D	0-1.3	115*	3/8” J.G.	60 psi	9 (lbs)	1
5502-IDN2-V77D	0.25-3.0	115*	3/8” Ports*	50 psi	9 (lbs)	1

Note: Comes with power cord. * Ports only. QJS553 (3/8” tube) or QJS554 (1/2” tube) fitting required. (See pump accessories.)

Permeate pump

Part Number	Electrical (Volts)	Fitting	Ship Weight	No. / Case
ERP-1000	Non Elec.	1/4” J.G.	2 (lbs)	1

Pump Acessories & Saddle Valves

Pump acessories, feed water & waste water saddle valves.

Pump Accessories

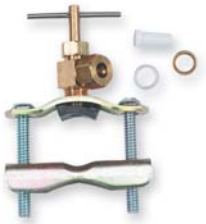
Part Number	Description	Pump	No. Per Case
PPC-1000	Permeate pump clip	ERP-1000	1
AFR-603	Auto flush valve	6800 & 8800	1
PSW-240	Tank psi switch, 1/4” J.G.	6800 & 8800	1
PSW-340	Tank psi switch, 3/8” J.G.	6800 & 8800	1
ESO-460-093	Electronic solenoid valve	6800 & 8800	1
LPS	Low pressure switch	6800 & 8800	1
TLC-DC	Tank level controller	6800 & 8800	1
TAS-114-19-EP1	115V transformer, 0.8 AMP	6800	1
TAS-234-19EP	230V transformer, 0.8 AMP	6800	1
TAS-104-14	100V transformer, 0.8 AMP	6800	1
TACS-114-48	115V transformer, 2 AMP	8800 & 5800	1
TACS-234-48RF	230V transformer, 2 AMP	8800 & 5800	1
TACS-104-48	100V transformer, 2 AMP	8800 & 5800	1
ASV2000	Shut-off valve	ERP-1000	1
M53-095-AC	Rear end bell	6800	1
68011	Pump head	6800	1
QJS553	3/8” x 3/8” fitting	5502-IDN2-V77D	1
QJS554	1/2” x 1/2” fitting	5502-IDN2-V77D	1

Feed water & drain water saddle valves

We offer a complete line of feed water and waste water saddle valves for every application, including standard models, saddle valves with John Guest® quick connect fittings and valves with John Guest® ball valves.

ADAPT-A-VALVE (P/N F134007)

SV-6



SV-6EZ

SV-1/SV-2

Feed water saddle valves

Part Number	Tube	Pipe	Pipe	No. / Case
SV-1	1/4” Comp.	1/2” MNPT	1/2” FNPT	200
SV-2	1/4” Comp.	3/8” MNPT	3/8” FNPT	250
SV-3	1/4” Comp.	Fits pipe 3/8” to 1-1/4”		250
SV-6	1/4” Comp.	Fits pipe 3/8” to 5/8”		250
SV-3L	1/4” Comp.	Fits pipe 3/8” to 1-1/4”		250
SV-6L	1/4” Comp.	Fits pipe 3/8” to 5/8”		250
SV-ADPT	Adapter for 1/4” to 3/8” comp. fittings			25
F134007	1/4” connects to angle stop			1

Feed water saddle valves with J.G. quick connect fittings

Part Number	Tube	Pipe	Pipe	No. / Case
SV-6EZ	1/4” J.G.Q.C.	Fits pipe 1/4” to 5/8”		250
SV-6EZ38	3/8” J.G.Q.C.	Fits pipe 1/4” to 5/8”		250

Faucets

Full range of faucets for every application.

WDF-103B

WWF-LRLL-C

Watts Top mount faucets (in chrome & brushed nickel)

WWF-CLASSIC

WWF-MODERN

Long reach faucets for RO systems and under counter filters

Part Number	Mount	Type	Brand	Finish	Tube	No. / Case
F116000	Top mount	Air gap••	Watts	Chrome	1/4”	1
F116071	Top mount	Non air gap	Watts	Chrome	1/4”	1
F116072	Top mount	Air gap••	Watts	Brushed nickel	1/4”	1
WDF-103B	Under counter	Non air gap	Flowmatic	Chrome	1/4”	50
WDF-103AW	Under counter	Non air gap	Flowmatic	White	1/4”	50
WDF-103LA*	Under counter	Low lead	Flowmatic	Chrome	1/4”	50
WDF-103SFLA*	Under counter	Low lead	Flowmatic	Satin	1/4”	50
WDF-103SS	Under counter	Lead free	Flowmatic	Stainless steel	1/4”	50
WDF-103V	Under counter	Vented	Flowmatic	Chrome	1/4”	50
WDF-803	Under counter	Deluxe	Flowmatic	Chrome	1/4”	50
WDF-833	Under counter	Deluxe	Flowmatic	Chrome / Gold	1/4”	50
WWF-LRLL-C	Under counter	Non air gap	Watts	Chrome	1/4"	1
WWF-LRLL-BN*	Under counter	Non air gap	Watts	Brushed Nickel	1/4"	1
WWF-LRLL-W*	Under counter	Non air gap	Watts	White	1/4"	1
WWF-LRLL-C-AG*	Under counter	Air Gap	Watts	Chrome	1/4"	1
WWF-CLASSIC*	Under counter	Non air gap	Watts	Chrome	1/4"	1
WWF-MODERN*	Under counter	Non air gap	Watts	Chrome	1/4"	1
F103 REPAIR	Faucet repair kit					
WDF-EXT	3” shank extension					1

*Meets State of California requirements for lead-free faucets. ** The quietest air gap faucet on the market!

8” faucets for RO systems and under counter filters

Part Number	Type	Brand	Finish	Tube	Shank	No. / Case
WDF-101B	Std.	Flowmatic	Chrome	1/4"	2"	50
WDF-101LA*	Low lead	Flowmatic	Chrome	1/4"	2"	50

*Meets State of California requirements for lead-free faucets.

Feed water saddle valves

Part Number	Size	Type	Pipe	Pipe	No. / Case
SVBV-14	1/4"	John Guest	1/2" MNPT	1/2" FNPT	25
SVBV-38	3/8"	John Guest	1/2" MNPT	1/2" FNPT	25

Drain water saddle valves

Part Number	Size	Type	Pipe	Pipe	No. / Case
SC500B14	1/4"	Jaco	Fits pipe 3/8" to 1-1/4"		200
SC500B38	3/8"	Jaco	Fits pipe 3/8" to 1-1/4"		200
F12-38JG	3/8"	Jaco	Fits 1-1/2" drain lines		10

Other Components

Check valves for tubing; digital water meters; KDF® media.

Check valves (ball type for product water)

Part Number	Description	No. / Case
Inserts		
C220*	Fits J.G. 1/8”	100
C256*	Fits Jaco 1/8”	100
C288*	Fits Jaco 40-4-4	100
C312*	Fits Jaco 10-4-4	100
RC385-OR	Fits membrane permeate tube	100
F1/4SCV	Single check valve, 1/4”	80
F3/8SCV	Single check valve, 3/8”	80
Assembled		
C256JF	IN 40-4-2-N-O Jaco elbow	10
C256JF-ST	IN 10-4-2-N-O Jaco male connection	10
C220JG**	IN Pl48021S J.G. elbow	10
C220JG-ST**	IN Pl48021S J.G. male connection	10
C288JF	IN 40-4-4-N-O Jaco elbow	10
C312JF-ST	IN 10-4-4-N-O Jaco male connection	10

*Reverse check valves also available. Add “R” in front of product code.
** Also available in white.

Digital water meters

Model 100 provides an audible and flashing alarm to indicate when capacity has been reached and offers capacity settings based on flow (gallons) or time (days). Model 200 monitors up to five independent functions (pre-filter, post filter, membrane, etc.) Both models use power only when water flows, provides a low battery alarm and comes with a one year limited warranty. Packaged per carton.

Model	Functions	Measures	Capacity Settings (Gals.)	Time Setting	Flow Range (gpm)
FPDM-100	1	Gallons	100 - 9,900	30 - 720 days	0.33 - 2.0
FPDM-200	5	Gallons	100 - 19,900	30 - 720 days	0.33 - 2.0
FPDM-200LD	5	Liters	100 - 19,900	30 - 720 days	0.33 - 2.0

KDF®

KDF filter media is a patented process medium, which is typically used ahead of activated carbon to enhance and extend it’s performance. With KDF, there is less bacteria, less free chlorine, less scale build-up and less maintenance. Two types are available for municipal and well water applications.

Part Number	Type	Water source	Use	Drum Weight	Cu. Ft.
KDF55-DRUM	KDF55	Municipal	Carbon pre-treatment	57 lbs.	1/3
KDF85-DRUM	KDF85	Well	Iron, H.S. reduction	57 lbs.	1/3

WaterPEX® Plumbing Products

Features & benefits

- Safe - no solvents, glues or flames needed.
- Reduce installation time with fewer connector fittings.
- Leak-proof; no solder or glues to make connections.
- Reliable, meets or exceeds plumbing codes.
- Non-corrosive; resistant to scaling; freeze resistant.
- Virtually “silent”.
- Lightweight & Flexible for easy installations.
- Lower material cost compared to Copper and CPVC.
- 25 Year warranty.

PEX pipe (Cross-linked polyethylene)

Part Number	Size	Length	Color	No. / Case
WPFP08-50R	1/2"	10’	Red	10
WPFP08-50B	1/2"	10’	Blue	10
WPFP08-50W	1/2"	10’	White	10
WPFP12-25R	3/4"	10’	Red	10
WPFP12-25B	3/4"	10’	Blue	10
WPFP12-25W	3/4"	10’	White	10
WPTS16-5W	1”	20’	White	10

Note: PEX pipe is not suitable for installations in direct sunlight. Other lengths available please inquire.

PEX compression fittings (poly alloy)

Part Number	Fitting	Size	Case Qty
WP15P-08PB	Coupler	1/2"CF X 1/2"CF	10
WP15P-12PB	Coupler	3/4"CF X 3/4"CF	10
WP15P-16PB	Coupler	1”CF X 1”CF	10
WP18P-08PB	Tee	1/2"CF X 1/2"CF X 1/2"CF	10
WP18P-12PB	Tee	3/4"CF X 3/4"CF X 3/4"CF	10
WP18P-16PB	Tee	1"CF X 1"CF X 1"CF	10
WP19P-08PB 90	Elbow	1/2"CF X 1/2"CF	10
WP19P-12PB 90	Elbow	3/4"CF X 3/4"CF	10
WP19P-16PB 90	Elbow	1”CF X 1”CF	10
WP12B-1612PB	Threaded adapter	3/4"CF X 1”MPT	10
WPBV-12	Inline ball valve	3/4"CF X 3/4"CF	1

Note: Not a complete list, other sizes and configurations are available please inquire.

Compression rings (304 stainless steel)

Part Number	Fitting	Case Qty
WP9S-08PB	1/2" CinchClamp®	10
WP9S-12PB	3/4" CinchClamp®	10
WP9S-16PB	1” CinchClamp®	10

Installation tools

Part Number	Fitting	Case Qty
WPTC-2PB	Rachet type professional tube cutter	1
WPCCT-1	Ratchet type CinchClamp® install tool	1
WPCRT-1	Heavy duty CrimpRing removal tool	1

WaterPEX® Plumbing Products

Sea Tech fittings and PEX pipe save time and money for quick, easy and secure pipe connections! Sea Tec® fittings connect to Copper, CPCV, or Pex pipe.

Applications

- Water conditioner Installations
- Residential and commercial cold and hot water distribution systems
- Commercial RO installations
- Filter housing installations

WaterPex® by Watts

PEX is an acronym for cross-linked polyethylene. PEX is polyethylene (PE) material that has undergone a chemical or physical reaction that causes the molecular structure of the PE chains link together. The result is a product that is perfect for replacing rigid and non-corrosion resistant plumbing materials such as steel pipe, Copper tubing, and CPVC.

Plumbing fixtures are easy to install with Sea Tec® quick connect fittings and Pex pipe when connecting to copper.

WaterPEX® Flow Characteristics at 60 PSI

Flow (GPM)	3/8" Tubing		1/2" Tubing		3/4" Tubing		1" Tubing	
	Press. Drop psi/100'	Velocity Ft./sec	Press. Drop psi/100'	Velocity Ft./sec	Press. Drop psi/100'	Velocity Ft./sec	Press. Drop psi/100'	Velocity Ft./sec
1	7.3	3.2	1.8	1.7	Water velocity too low			
2	24.5	6.3	5.9	3.5	1.2	1.8	0.4	1.0
3	Water Velocity too low		12.1	5.2 2.4	2.7	0.7	1.6	
4			20.1	7.0	4.0	3.5	1.2	2.1
5					5.7	4.4	1.8	2.7
6					8.1	5.3	2.5	3.2
7					10.7	6.2	3.2	3.7
8					13.5	7.1	4.1	4.3
9							5.0	4.8
10							6.0	5.3

Codes, Standards and Approvals

Watts WaterPEX® is manufactured in accordance with American Society for Testing and Materials (ASTM) F-876 and F-877 to SDR-9 dimensional standards. It is listed by the National Sanitation Foundation to NSF Standards 14 and 61 for use in potable water systems. WaterPEX® is listed by NSF to be in compliant to the Uniform Plumbing Code. All WaterPEX® is labeled B137.5 which indicates that it is compliant to the CSA Standards B137.5.

Section 8

Commercial and Industrial Products

Flow-Max® Commercial Quality Filter housings

Check out these many features and benefits:

- *100% stainless steel for durability.*
- *304 and 316 stainless steel available.*
- *Convenient band clamp lid closure is standard for easy cartridge replacement.*
- *Pipe fittings are readily accessible for easy installation.*
- *Adjustable top plate accepts variable length cartridges for more options.*
- *Two drains provided for clean and dirty fluids.*
- *Legs and mounting tabs are available.*

- *Knife edge seals are provided at both ends of all DOE cartridges for superior performance.*
- *Rated for temperatures to 250° F. (No plastic holding rods.)*
- *Pressure rating to 150 psi.*
- *Housings for pressures to 300 psi are available.*
- *Optional sanitary connections.*
- *Models to accept DOE, 222 and cartridges with 226 end caps.*
- *Protective poly-coat over stainless steel standard finish.*
- *Electo-polishing is available.*
- *Standard, Premium Series and Jumbo models are in stock for immediate shipment.*

Specifications

Material:	304 and 316 stainless steel are available.
Pressure rating:	Housings are rated for pressures to 150 psi (10 bar).
Temperature:	Filters are rated for temperatures to 250° F (121° C). Please consider cartridges to be used.
Gaskets & seals:	Buna-N is standard. Viton, EDPM and Teflon are available.
Finish:	Protective poly-coat over stainless is standard finish. Electro-polishing available.
Pressure drop:	Initial pressure drop is <1 psi at designed flow rates for housings only.
Cartridge types:	Housings are designed to accept DOE cartridges. Adapters for 222 & 226 cartridges available.

Models

4 & 5 round models

7 round

12 round

22 round

Premium Series

Flow-Max® Jumbo Cartridge Filter Housings

Single cartridge models for the most "user friendly" filtration possible!

Model "90" Model "170" Model "40"

Flow-Max® commercial quality jumbo cartridge filter housings in 316SS

Model No.	Max. Flow (GPM)	Cartridge Style	Number Of Cartridges	Pipe Size	Lid Closure	Shipping Wt. (Lbs.)
FMJCH40	50	"40"	1	2" NPT	V-Band	31
FMJCH90	100	"90"	1	2" NPT	V-Band	56
FMJCH170	150	"170"	1	2" NPT	V-Band	62

Note: Commercial quality jumbo cartridge housings are rated for pressures to 150 PSI (10 bar) and temperatures to 140˚F with standard jumbo cartridges and 250°F using high temp cartridges. Pressure gauges included and installed on inlets and outlets.

User friendly Flow-Max jumbo cartridges are easy to install, easy to service and easy to replace!

Adjustable compression cap provides superior sealing for both ends of the jumbo cartridge.

Model FMJCH170

Flow-Max® Commercial Filters

Stainless steel filter housings with easy, safe and secure band-clamp lid closure.

4 & 5 Round Models

12 Round

22 Round

Premium Series

Flow-Max® commercial quality multi-cartridge stainless steel filter housings (304SS or 316SS)

Model Number	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
FM4X1-1	4	25	25	1” NPT	1/2”	4	9-3/4” - 10”
FM5X1	5	30	25	2” NPT	1/2”	5	9-3/4” - 10”
FM4X2	4	60	40	2” NPT	1/2”	4	20”
FM4X3	4	90	60	2” NPT	1/2”	4	29-1/4” or 30
FM4X4	4	120	80	2” NPT	1/2”	4	40”
FM5X4	5	150	100	2” NPT	1/2”	5	40”
FM12X3	12	250	180	3” flange	1/2”	12	29-1/4” or 30”
FM12X4	12	300	240	3” flange	1/2”	12	40”
FM22X3	22	500	330	4” flange	1/2”	22	29-1/4” or 30”
FM22X4	22	600	440	4” flange	1/2”	22	40”

Flow-Max® Premium Series housings with mounting legs and pressure gauges

Model Number	Round	Max. Flow Rate (GPM) Pleated	Max. Flow Rate (GPM) Depth	Pipe Size	Drain Size (NPT)	No. Of Standard Cartridges	Cartridge Options (Lengths)
FMPS4X2	4	60	40	2” NPT	1/2”	4	20”
FMPS5X3	5	120	75	2” NPT	1/2”	5	29-1/4” or 30”
FMPS5X4	5	150	100	2” NPT	1/2”	5	40”
FMPS7X4	7	200	140	2” NPT	1/2”	7	40”

Note: Flow rates shown above are for guidelines only. Actual flow rates are based on cartridge type, micron rating, solids content and a number of other factors

Flow-Max® In-Line Filters

Single cartridge, metal filter housings for in-line installations.

Applications

- High temperatures
- High pressures
- Aggressive chemicals
- Water
- Oils
- Coolants
- Plating solutions
- Solvents
- Lubricants
- Hydraulic fluids

Models

- Nickel plated brass heads with 304 stainless sumps and T-Handles for easy sump removal
- 304 stainless steel for DOE cartridges
- 316 stainless steel for 222 o-ring end caps
- Carbon steel

Specifications

- Rated for pressures to 250 PSI (17.5 bar)
- Rated for temperatures to 250°F (121°C)
- Buna-N seals are standard. Optional seals available

Models with nickel plated brass heads, 304 stainless steel sumps and T-Handles

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-BN-304-34T	10" *	3/4"	1	304 SS	Nickel / Brass	7
FM20-BN-304-34T	20"	3/4"	1	304 SS	Nickel / Brass	10

*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250°F

Models with 304 stainless steel heads and 304 sumps

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-304-34	10" *	3/4"	1	304 SS	304 SS	7
FM20-304-34	20"	3/4"	1	304 SS	304 SS	10

*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250°F

Models with 316 stainless steel construction for cartridges with 222 o-ring end caps

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-316-34-222	10"*	3/4"	1	316 SS	316 SS	7
FM20-316-1-222	20"	1"	1	316 SS	316 SS	10

Filter housings listed directly above are rated for pressures to 250 psi and temperatures to 250˚F.

Models with carbon steel sumps and cast iron heads

Model Number	Cartridge Length	Pipe Size	No. Of Cartridges	Sump	Head	Shipping Weight (lbs.)
FM10-CS-34	10"*	3/4"	1	Carbon	Cast iron	7
FM30-CS-34	30"	3/4"	1	Carbon	Cast iron	12

*Accepts 10" and 9-7/8" wound or 9-3/4" cartridges with rigid end caps (pleated). Rated for pressures to 250 psi and temperatures to 250˚F

BIG-BUBBA® FILTERS

Non-Metallic Filter Housings for High Flow Rates & Low Cost

Rugged construction

Big-Bubba filter housings are made of rugged, glass-reinforced polyproplylene so they will not chip, rust or dent. And because all wetted surfaces are non-metallic, they are ideal when chemical compatibility is an issue and for sea water applications.

Low cost

Big-Bubba filters are an economical replacement for stainless steel filtration equipment because of their non-metallic construction and today's high cost of stainless steel!

NSF

ANSI / NSF-61 CERTIFIED (BBH-150)

Applications

Big-Bubba filters are ideal for a wide range of applications, including:

- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction
- Replacement for bag filters for more filter area
- Replacement for multiple cartridge filters for greater convenience
- Water for livestock & poultry
- Whole house filtration

Proprietary cartridges

We offer a full line of replacement cartridges for Big-Bubba filters, all with double o-ring seals for superior performance. Cartridges are easy to install, easy to service and easy replace. Some of the filter media we use in select micron ratings are cleanable and reusable to reduce filtration costs.

E-Z change-out

Cartridge replacement is easy as 1-2-3:

1. Remove swing bolts.
2. Remove lid.
3. Rotate cartridge 1/4 turn and pull-up.

Two outlets

Big-Bubba filters have two outlets on opposite sides to allow more flexibility with piping configurations. Filter may be installed in-line or piping may come from the same direction. A plug is provided for the outlet, not used.

Big-Bubba filters offer a wide range of replacement cartridges for every application!

Big -Bubba® filters are ideal as stand alone filters or used for filtration systems.

ANSI / NSF-61 CERTIFIED (BBH-150)

Parallel installation

Parallel installations are recommended to achieve high flow rates, by installing filters on a common manifold, feeding all filters installed in a row.

Series installation

Series installations are recommended for applications such as surface water filtration, where cartridges having different micron ratings are used.

Three cartridge types

Pleated cartridge

Pleated cartridges

Ideal for more critical applications, offering greater efficiency, more surface area for greater throughput and reduced cost.

Product code	Media Type	Micron Rating	Per case
BBC-150-P1A	PP	1 Absolute	1
BBC-150-P1	PP	1	1
BBC-150-P5	PP	5	1
BBC-150-P20	PE	20	1
BBC-150-P50	PE	50	1
BBC-150-PM150	Mesh	150	1

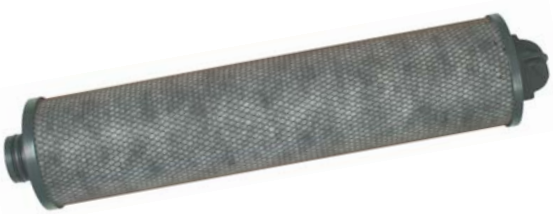
Note: 5, 20, 50 and 150 micron cartridges are cleanable and reusable to reduce costs.

Depth cartridges

Melt blown Polypropylene cartridges are recommended when depth filtration is necessary for gelatinous substances and when chemical resistance may be a requirement.

Product code	Media Type	Micron Rating	Per case
BBC-150-D1	PP	1	1
BBC-150-D5	PP	5	1
BBC-150-D20	PP	20	1
BBC-150-D50	PP	50	1

Depth cartridge



Activated carbon cartridge

Activated carbon

Ideal for whole house filtration to reduce chlorine, taste, odors and sediment.

Product code	Media Type	Micron Rating	Per case
BBC-150-AC	Activated Carbon	10	1

Note: We build filtration systems, or they may be installed on site. For more information please inquire!

Big-Bubba® Specifications

Big-Bubba housing

Specifications	Data
Body (all wetted surfaces)	Glass reinforced PP
Cartridge end caps	Glass reinforced PP
Swing bolts	304 stainless steel
O-rings (cartridges)	EPDM (Viton optional)
O-ring (lid)	EPDM (Viton optional)
Pipe fittings	2” slip
Overall height	40”
Width (vessel OD)	12”

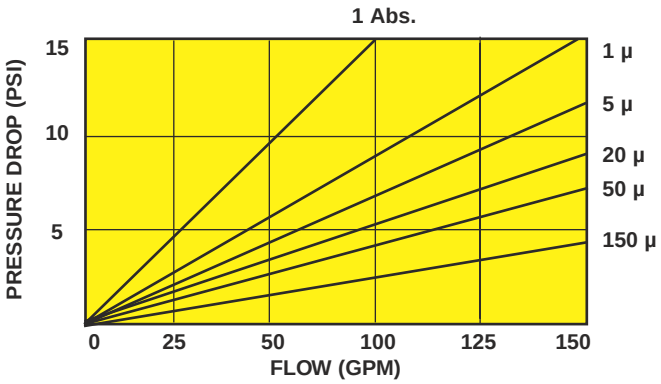
Big-Bubba cartridges

Specifications	Data
Maximum flow rate	150 GPM* (36 M^3/hr.)
Maximum flow (carbon)	15 GPM
Maximum flow (1 Absolute)	50 GPM
Maximum temperature	175˚F (80˚C) @ 80 psi
Maximum working pressure	125 psi (8.75 bar)
Burst test	300 psi
Cycle test	100,000

* Highly dependent on micron rating, solids content and other factors. Please see pressure drop chart below.

Low pressure drop

Big-Bubba filter housings are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes for Big-Bubba filter cartridges. (See chart at right for pressure drop data using pleated cartridges.)



Big-Bubba cartridge specifications

	Pleated	Depth	Activated Carbon
Media	PP	PP	Activated carbon
End caps	PP + FG	PP + FG	PP
Center tubes	PP	PP	PP
Maximum flow rate (GPM)	150	100	15
Maximum temperature	175˚F (80˚C)	175˚F (80˚C)	140°F (60°C)
Maximum ΔP (psi)	30	40	30
Chemical resistance	Excellent	Excellent	Not a factor (for water)
Length (media)	26-1/4"	26-1/4"	26-1/4"
O-rings (dual)	EPDM	EPDM	EPDM
Shipping weight (lbs.)	5	5	7
Carton dimensions	7" x 7" x 31"	7" x 7" x 31"	7" x 7" x 31"
Micron ratings	1A, 1, 5, 20, 50, 150	1, 5, 20, 50	10

Note: Flow rates are based on each specific application, micron rating, solids content and a number of other factors. End user should consider these factors when selecting the filter housing (or number of filter housings) needed for their particular requirement.

Spare parts

Part Numbers	Description
BB-LID	Lid
BB-PR	Pressure release button
PG15L25	Pressure gauge
BB-EYEBOLT	Eye bolt
BB-POST	Post for eye bolt
BB-WASHER	Washer for eye bolt
DRAINPLUGOR	Drain plug with o-ring

Part Numbers	Description
BB-ORING-E	O-ring for lid (EPDM)
BB-ORING-V	O-ring for lid (Viton)
BC-ORING-E	O-ring for cartridge (EPDM)
BC-ORING-V	O-ring for cartridge (Viton)
BB-COUPLER	Pipe fitting coupler (two pieces)
BB-COUPLER-OR	O-ring for coupler
BB-PLUG	Plug for second outlet

Industrial filter housing for 40” Big-Bubba® Cartridges

Filter housings are available in carbon and stainless steel for commercial, industrial and small community water filtration applications.

Filter housing features and benefits

- Rugged construction for heavy-duty performance
- Rated for pressures to 150 PSI (10 bar)
- Standard models for flow rates up to 1500 GPM
- Swing bolt lids with davit assist for ease-of-use
- 304, 316 & carbon steel construction
- ASME design, with U-stamp available
- Models with 1, 3, 5 and 8 cartridges are standard

Filter cartridge features and benefits

- Cartridges are 40" long x 6-3/8" OD for high flow
- Filter media is 100% synthetic (no cellulose)
- Pleated design for low pressure drop & long life
- Cartridges are cleanable and reusable to lower costs*
- Wide range of micron ratings are available
- End caps have o-ring seals for superior performance

*In water filtration, five micron and up.

Specifications

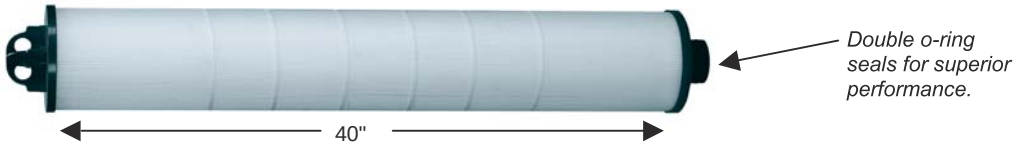
Temperature ratings	250°F (housings) 175° F (cartridges)
Pressure drop, vessel	< 2 psi (empty)
Max. flow, 1 Absolute cartridges	50 GPM per 40" high-flow cartridge*
Max. flow, 1 micron nominal	100 GPM per 40" high-flow cartridge*
Max. flow, 5 micron nominal	125 GPM per 40" high-flow cartridge*
Max. flow, 20 micron nominal	150 GPM per 40" high-flow cartridge*
Max. flow, 50 & 100 micron nominal	200 GPM per 40" high-flow cartridge*
Lid gaskets	Buna-N (standard); others available

Models

Model Number	Material	Max. Flow (GPM)*	Cartridges	Pipe Size	Drain	Vent
BBH-40-1-CS	Carbon steel	200	1	3" FNPT	1" FNPT	1/4"
BBH-40-3-CS	Carbon steel	600	3	4" Flange	1" FNPT	1/2"
BBH-40-5-CS	Carbon steel	1,000	5	8" Flange	1" FNPT	1/2"
BBH-40-8-CS	Carbon steel	1,500	8	12" Flange	1" FNPT	1/2"
BBH-40-1-30	304 stainless	200	1	3" FNPT	1" FNPT	1/4"
BBH-40-3-304	304 stainless	600	3	4" Flange	1" FNPT	1/2"
BBH-40-5-304	304 stainless	1,000	5	8" Flang	1" FNPT	1/2"
BBH-40-8-304	304 stainless	1,500	8	12" Flange	1" FNPT	1/2"
BBH-40-1-316	316 stainless	200	1	3" FNPT	1" FNPT	1/4"
BBH-40-3-316	316 stainless	600	3	4" Flange	1" FNPT	1/2"
BBH-40-5-316	316 stainless	1,000	5	8" Flange	1" FNPT	1/2"
BBH-40-8-316	316 stainless	1,500	8	12" Flange	1" FNPT	1/2"

*Actual flow rates are based on micron rating, solids content and other factors. Please refer to pressure drop charts for more information.

Watts® brand high-flow pleated cartridges for greater throughput.

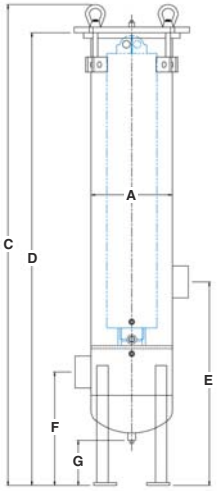


Watts® brand pleated cartridges outperform wound, spun, melt blown, resin bonded and other depth type cartridges because they are pleated to provide greater surface area and more throughput for longer life. Low pressure-drop is another advantage, allowing for increased flow rates and the use of smaller filter housings. Our 100% synthetic filter media is washable, so cartridges are reusable (five micron and up) to reduce filtration costs. Watts brand 40" high-flow cartridges are available in a wide range of removal ratings, including one micron absolute, 1, 5, 20, 50 and 100 micron, nominal.

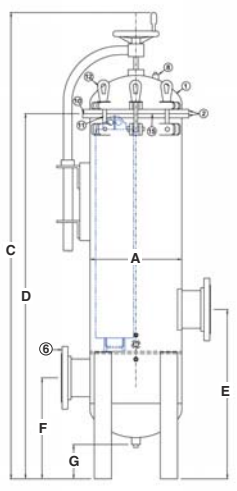
Filter cartridge product codes

Product code	Micron Rating	Media	Length	OD	Shipping Weight
BBC-40-P1A	1 Absolute	PP	40"	6-3/8"	10 lbs.
BBC-40-P1	1	PP	40"	6-3/8"	10 lbs.
BBC-40-P5	5	PP	40"	6-3/8"	10 lbs.
BBC-40-P20	20	PE	40"	6-3/8"	10 lbs.
BBC-40-P50	50	PE	40"	6-3/8"	10 lbs.
BBC-40-P100	100	PE	40"	6-3/8"	10 lbs.

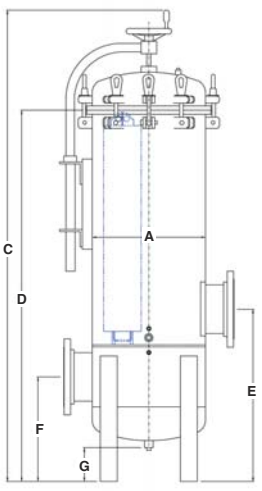
Filter housing dimensional drawings



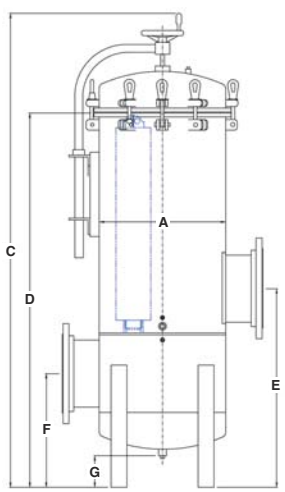
1 high-flow cartridge



3 high-flow cartridges



5 high-flow cartridges



8 high-flow cartridges

Model	A Diameter	B Width (flange to flange)	C Overall Height (including davit)	D Operating Height	E Floor to Inlet Center Line	F Floor to Outlet Center Line	G Floor to Filter
BBH-40-1	10.75”	15.0”	63.98”	60.23”	27.11”	15.11”	6”
BBH-40-3	16.0”	26.0”	79.71”	61.97”	28.72”	16.72”	6”
BBH-40-5	20.0”	30.0”	83.60”	65.86”	30.54”	15.54”	6”
BBH-40-8	24.0”	38.0”	89.92”	70.98”	37.73”	21.61”	6”

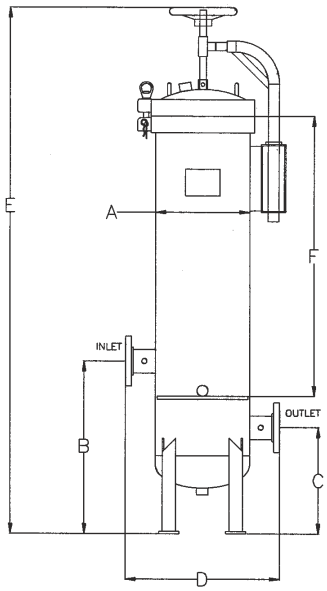
Watts® Industrial Filters for Standard Cartridges

Typical filtration applications

- Municipal water
- Community water
- Pre-filtration for RO systems
- Drinking water filtration
- Surface water filtration
- Boilers & cooling towers
- Process water
- Ground water
- Municipal water
- Oils and hydraulic fluids

Materials and other options

- 304 stainless steel
- 316 stainless steel
- Carbon steel
- ASME u-stamp (optional)



Dimensional drawing

Industrial filter housings for 30" cartridges

Model Number	Round	Standard Cartridge	Pleated Cartridges (GPM)	Depth Cartridges (GPM)	Material	Pipe Size	Drain Size	Ship. Weight (lbs.)
WIF3X3	3	30"	90	45	Specify	2" NPT	1"	50
WIF5X3	5	30"	150	75	Specify	3" flange	1"	65
WIF10X3	10	30"	350	400	Specify	6" flange	3/4"	225
WIF24X3	24	30"	600	500	Specify	6" flange	1"	495
WIF32X3	32	30"	1,000	500	Specify	6" flange	1-1/2"	950

Industrial filter housings for 40" cartridges

Model Number	Round	Standard Cartridge	Pleated Cartridges (GPM)	Depth Cartridges (GPM)	Material	Pipe Size	Drain Size	Ship. Weight (lbs.)
FMIF47X4	47	40"	1,500	1,050	Specify	8" flange	1-1/2"	480
FMIF76X4	76	40"	2,000	1,600	Specify	8" flange	1-1/2"	800

Note: Industrial filter housings listed above include swing-bolt and eye nut lid closure (davit for lid lift on 12 rounds and above), seals for DOE cartridges and elements with 222 o-ring end caps, without the need for special adapters, and they accept cartridges from 2-1/2" to 2-3/4" OD. Housings are rated for pressures to 150 psi (10 bar) and temperatures to 250°F (121°C). Standard gaskets are Buna-N. Shipping weights are approximate.

Important: For carbon steel housings, add "CS" at the end of the product code. For 304 stainless steel housings add "304" at the end of the product code. For 316 stainless steel housings add "316" at the end of the product code.

Dimensions (housings using 30” cartridges)

Part Number	ROUND	A	B	C	D	E	F
WIF5X3	5	8.625”	42.4”	12.4”	13.1”	52.3”	32..5”
WIF10X3	10	12.75”	24.5”	14.5”	22.00”	66.0”	32.5”
WIF24X3	24	18.0”	29.45”	17.45”	28.0”	69.73”	32.5”
WIF32X3	32	20.0”	26.85”	16.24”	30.0”	69.73”	32.5”

Dimensions (housings using 40” cartridges)

Part Number	ROUND	A	B	C	D	E	F
WIF47X4	47	24.0”	28.23”	18.23”	40.0”	79.73”	42.5”
WIF80X4	76	30.0”	34.12”	22.12”	28.0”	83.82”	42.5”

Flow-Max® Bag Filters & Filter Bags

Bag housings with heavy-duty construction and swing-bolt lid closure.

Features & benefits

- Heavy-duty construction
- Swing bolt lid closure with eye nuts
- Rated for pressures to 150 PSI
- 2" NPT pipe with vent and drain
- 304 stainless steel baskets
- Adjustable legs
- Ports for pressure gauges
- Bottom outlet for easy installation
- Stainless legs on stainless models

Bag filter housing models

Model No.	No.	Description	Housing Material	Adjustable Legs	Bag Size	Pipe Size
FMBH2-CS	2	Swing-bolt bag filter	Carbon Steel	Carbon Steel	#2	2" NPT
FMBH2-304	2	Swing-bolt bag filter	304SS	Stainless	#2	2" NPT
FMBH2-316	2	Swing-bolt bag filter	316SS	Stainless	#2	2" NPT
FMBH1-CS	1	Swing-bolt bag filter	Carbon Steel	Carbon Steel	#1	2" NPT
FMBH1-304	1	Swing-bolt bag filter	304SS	Stainless	#1	2" NPT
FMBH1-316	1	Swing-bolt bag filter	316SS	Stainless	#1	2" NPT

#2 filter bags

Part Number	Number	Size	Material	Micron Rating	No./ case
FMPPFB2-1	#2	7" x 32"	PP	1	20
FMPPFB2-5	#2	7" x 32"	PP	5	20
FMPPFB2-10	#2	7" x 32"	PP	10	20
FMPPFB2-25	#2	7" x 32"	PP	25	20
FMPPFB2-50	#2	7" x 32"	PP	50	20
FMPPFB2-100	#2	7" x 32"	PP	100	20

Filter bags made with glazed polypropylene felt with galvanized carbon steel rings.

#2 mesh bags

Part Number	Number	Size	Material	Micron Rating	No./ case
FMNMOFB2-100	#2	7" x 32"	NMO	100	20
FMNMOFB2-150	#2	7" x 32"	NMO	150	20
FMNMOFB2-250	#2	7" x 32"	NMO	250	20
FMNMOFB2-400	#2	7" x 32"	NMO	400	20

Filter bags made with glazed polypropylene felt with galvanized carbon steel rings.

#1 felt bags

Part Number	Number	Size	Material	Micron Rating	No./ case
FMPPFB1-1	#1	7" x 16"	PP	1	20
FMPPFB1-5	#1	7" x 16"	PP	5	20
FMPPFB1-25	#1	7" x 16"	PP	25	20
FMPPFB1-50	#1	7" x 16"	PP	50	20
FMPPFB1-100	#1	7" x 16"	PP	100	20

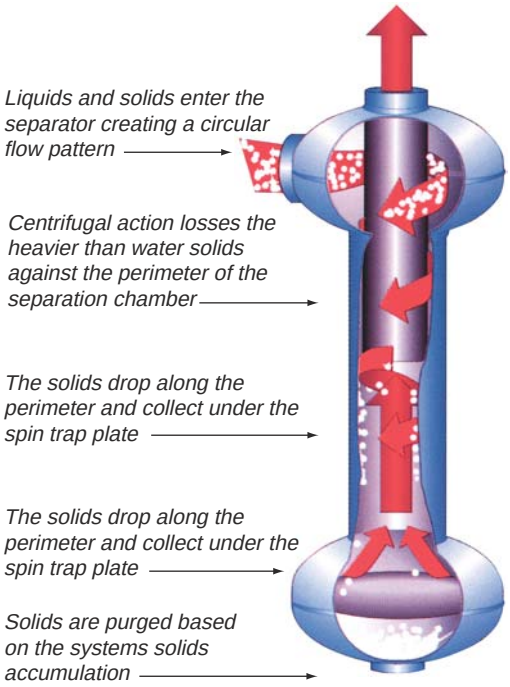
Filter bags made with glazed polypropylene felt with galvanized carbon steel rings.

Flow-Pro® Centrifugal Separators

Removes dense solids without replacable filter elements.

How they work

High velocity influent passes through the separator, which is designed to produce a circular flow pattern. Using gravitational force, sand, debris and sludge migrate to the separator's side walls and downward, into a solids holding chamber. Cleansed effluent rises up, through the vortex and is returned back to the system. Subsequently, the separated solids are purged from the holding chamber, continuously, manually or automatically, depending on what type equipment is utilized.


Liquids and solids enter the separator creating a circular flow pattern
Centrifugal action losses the heavier than water solids against the perimeter of the separation chamber
The solids drop along the perimeter and collect under the spin trap plate
The solids drop along the perimeter and collect under the spin trap plate
Solids are purged based on the systems solids accumulation

Features & benefits

- Removes 98% of all solids with a 1.8 specific gravity or more, and all particles greater than 40 micron in size
- Rated for pressures to 150 PSID
- Rated for temperatures to 200°F
- Epoxy coated, carbon steel construction
- No routine maintenance required
- Minimum 4 PSI pressure drop
- Compact design to save space

Flow-Pro in-line centrifugal separator

Flow-Pro in-line centrifugal separators (no legs)

Model Number	Flow Rate Range (GPM)	Diameter	Height	Inlet (Side)	Outlet (Top)	Drain (Bottom)	Shipping Weight
FP-CS-C-75	14-25	6”	22-7/16”	3/4”	3/4”	3/4”	16
FP-CS-C-100	28-49	6”	22-7/16”	1”	1”	3/4”	18
FP-CS-C-150	67-115	6”	30”	1-1/2”	1-1/2”	3/4”	22
FP-CS-C-200	90-157	10”	34”	2”	2”	1-1/2”	42
FP-CS-C-300	205-355	10”	33-7/8”	3”	3”	1-1/2”	46

Stenner® Chemical Feed Pumps

Self-priming, peristaltic type feed pumps for chlorine and pH adjustment chemicals.

Peristaltic type feed pumps

Stenner® peristaltic feed pumps will not loose prime because they are self priming. Pumps may operate at pressures up to 100 psi, and may be mounted vertically or horizontally. Tube lubrication is not required.

Models

Part Number	Type	Model	GPD	PSI	Voltage	Injection Check	Tubing (Suction & discharge)	Shipping Weight
T55-45MHP2	Single	45	3	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-45MHP10	Single	45	10	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-45MHP10-220	Single	45	10	100	220v/60hz	T55-UCDBINJ	1/4"	8
T55-85MHP17	Single	85	17	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-85MHP40	Single	85	40	100	120v/60hz	T55-UCDBINJ	1/4"	8
T55-100DMHP20	Double	100	20	100	120v/60hz	T55-UCDBINJ	1/4"	9
T55-170DMHP34	Double	170	34	100	120v/60hz	T55-UCDBINJ	1/4"	9

Parts

Part Number	Description	Number Per Package
T55-UCCP201	Replacement tube #1	2
T55-UCCP202	Replacement tube #2	2
T55-UCDBINJ	Injection check valve for 1/4" tubing	1
T55-UC3ASYD	Roller assembly	1

Flow-Pro® Chemical Feed Pumps

Features & benefits

- Dual output control for easy & accurate adjustment.
- Turn-down ratio (500:1) provides excellent flexibility.
- 6 - 30 GPD maximum output at 80 psi.
- Quiet operation for residential or commercial use.
- Totally enclosed construction for chemical resistance and suitability for outdoor installation.

Standard models

Model No.	GPD		GPH		Liters Per Hour		ml / cc Per Min.		Electrical (w / plug)	Amps.	Ship Wt.
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max			
FP-DCP-12	0.04	12.0	0.002	0.5	0.006	1.9	0.11	32	120 VAC	1.4	8 lbs.
FP-DCP-30	0.06	30.0	0.003	1.25	0.010	4.7	0.16	79	120 VAC	1.4	8 lbs.

*Plug not suitable for export. Maximum injection pressure is 80 psi (5.5 bar) for all models.

Diaphragm repair kits

Part Number	Model	Description
FP-CFP-DRK-12	FP-DCP-12	Complete repair kit with diaphragm and associated components.
FP-CFP-DRK-24	FP-DCP-24	Complete repair kit with diaphragm and associated components.
FP-CFP-DRK-30	FP-DCP-30	Complete repair kit with diaphragm and associated components.

Pulsafeeder® Chemical Metering Pump

Ideal for commercial & industrial applications.

Series A+

The Series A+ offers manual control over stroke length and stroke rate as standard with the option to select external pace for automatic control.

- 6 distinct flow/pressure envelopes
  - Flow/pressure capacity ranging from 6 gpd (.95 lph) @150 psi (10.3 bar) to 48 gpd (7.57 lph) @ 50 psi (3.3 bar)
  - 100:1 turn down ratio
  - Optional external pacing with Auto/ Manual switch
  - Internally dampened to reduce noise - ideal for home installations
  - Water resistant for outdoor installations

Series E+

The Series E+ Plus offers manual control over stroke length and stroke rate as standard with the option to choose between 4-20mA or external pace inputs for automatic control.

- 20 distinct flow/pressure envelopes
- Flow/pressure capacity ranging from 3 gpd (.47 lph) @300 psi (20.7 bar) to 500 gpd (78.9 lph) @ 20 psi (1.4 bar)
- 100:1 turn down ratio
- Optional 4-20mA with stop function
- Optional External Pacing with stop function
- Auto-Off-Manual selection switch with lights
- Built-in circuit protection
- Water resistant cover over controls

Series A+ (standard industrial)

Model Number	Series	Tube Size	Electrical	Flow Rate
LB64SA-VTC1-XXX	A+	3/8"	115 Volt / 50 - 60 Hz	30 GPD @ 100 psi

Series E+ (premium industrial)

Model Number	Series	Tube Size	Electrical	Flow Rate
LPA3SA-VTC1-XXX	E+	3/8"	115 Volt / 50 - 60 Hz	12 GPD @ 100 psi
LPB4SA-VTC1-XXX	E+	3/8"	115 Volt / 50 - 60 Hz	24 GPD @ 100 psi
LPE4SA-VTC1-XXX	E+	3/8"	115 Volt / 50 - 60 Hz	44 GPD @ 100 psi

Series E+ (premium industrial with capacity to accept a 4-20 mA signal)

Model Number	Series	Tube Size	Electrical	Flow Rate
LPA3MA-VTC1-XXX	E+	3/8"	115 Volt / 50 - 60 Hz	12 GPD @ 100 psi
LPA3MB-VTC1-XXX	E+	3/8"	230 Volt / 50 - 60 Hz	12 GPD @ 100 psi

HF Scientific® Turbidity Meters

The newest member of the Watts Water Technologies family.

Micro 100® turbidity meter for laboratory & field use

Designed to provide the accuracy demanded for laboratory use. Auto ranging from 0 to 1000 NTU, with push button calibration. Available in White Light or Infrared. USEPA or ISO7072 compliant.

Part Number	Description
F20001	Micro 100WL (120v, 60hz)
F19950	Micro 100WL (100v, 240 VAC)

MicroTPW™ & MicroTPI™ hand held turbidity meters

Portable meter for field applications. Comes complete with shock resistant, rugged and waterproof carrying case. Auto ranging from 0 to 1,100 NTU. Push button calibration. "TPW", White Light model; "TPI, Infrared model.

Part Number	Description
F20000	Hand held turbidity model (TPW)
F20008	Hand held turbidity model (TPI)

HF Microtol® OnLine turbidity meter

Uses leading edge technology and thirty years of optical measurement experience to provide the most reliable line of regulatory reporting turbidity instruments available.

Catalog Number	Type	Range (NTU)	Ultrasonic Autoclean	USEPA Method 180.1	ISO 7027
20053	#2 white light	0-1000		•	
20054	#2 infrared	0-1000			•
20055	#3 white light	0-100	•	•	
20056	#3 infrared	0-100	•		•
20063	#4 white light	0-1000	•	•	
20064	#4 infrared	0-1000	•		•

Accessories

Part Number	Description
19783	HF OnLine windows software for data collection and reporting.
19609	Remote display for an additional digital readout.
19953	Primetime™ primary calibration kit (0.02, 10 & 100 NTU)
19957	Primetime™ primary calibration kit (full range including 0.02, 10 & 1000 NTU)

HF Scientific®

Chlorine Monitors & Measurement Equipment.

Each dispenser has enough reagent for 100 tests or multi-packs for 400 or 1000 tests. No foil, pouches and no mess!

PPD-2 Chlorine DPD reagent dispenser

The patented HF Powder Pop® dispenser delivers a precise dose of DPD reagent directly to the sample with the push of a button. No foil pouches to tear open and no mess to leave behind.

Number	**Test** (Package includes dispenser and reagent)
10500	Free chlorine, 5 ml samples for 100 tests
10500C	Free chlorine, 5 ml samples for 1000 tests (5 x 200 tests)
10502	Total chlorine, 5 ml samples for 100 tests
10502C	Total chlorine, 5 ml samples for 1000 tests (5 x 200 tests)
10504	Free chlorine, 10 ml samples for 100 tests
10504C	Free chlorine, 10 ml samples for 1000 tests (5 x 200 tests)
10506	Total chlorine, 10 ml samples for 100 tests
10506C	Total chlorine, 10 ml samples for 1000 tests (5 x 200 tests)

Chlorine Pocket Photometer

Gives accurate readings from 0 to 6 ppm. When packaged with the PPD-2 Chlorine Powder Pop dispenser the Chlorine Pocket Photometer has everything needed to measure free or total chlorine in a rugged, convenient package.

#10478 Chlorine Pocket Photometer

Chlorine Micro Check Test Strips

An accurate, safe and inexpensive alternative to reagent chlorine testing. Bottle of fifty strips.

#09940 Free chlorine.
#09941 Total chlorine.

Part No. 20040

CLX® OnLine Chlorine Residual Monitor

An economical and low maintenance instrument for chemical treatment applications where continuous monitoring and control of residual Free or Total Chlorine levels are required. Ability to use a 4-20mA output to control feed pumps for automatic dosing. Housed in a sturdy, shatterproof case with easy access to all functions and reagents.

- Measures Free or Total Chlorine.
- Low operating cost.
- Simple operation.
- Auto ranging from 0 to 10 mg/L.
- Uses colormetric DPD chemistry and micro processor based technology.

Flow-Pro® Pressure Gauges

Full line of stainless steel pressure gauges with brass and stainless fittings.

Side mount models (2-1/2" diameter)

Part Number	Type	PSI	KG	Fitting	Material (Body)	Material (Fittings)	Number Per Case
PG05L25	Glycerin Filled	0-75	0-5	1/4" MNPT	304 SS	Brass	1
PG07L25	Glycerin Filled	0-100	0-7	1/4" MNPT	304 SS	Brass	1
PG15L25	Glycerin Filled	0-200	0-15	1/4" MNPT	304 SS	Brass	1
PG20L25	Glycerin Filled	0-300	0-20	1/4" MNPT	304 SS	Brass	1

Back mount models (2-1/2" diameter)

Part Number	Type	PSI	KG	Fitting	Material (Body)	Material (Fittings)	Number Per Case
PG05B25	Glycerin Filled	0-75	0-5	1/4" MNPT	304 SS	Brass	1
PG07B25	Glycerin Filled	0-100	0-7	1/4" MNPT	304 SS	Brass	1
PG15B25	Glycerin Filled	0-200	0-15	1/4" MNPT	304 SS	Brass	1
PG20B25	Glycerin Filled	0-300	0-20	1/4" MNPT	304 SS	Brass	1

Flow-Pro® Ball Valves

High quality, attractively priced ball valves in stock for immediate shipment.

Flow-Pro white NSF certified PVC ball valves (solvent connection)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-PVCBV-50	Solvent	1/2"	PVC	100
FP-PVCBV-75	Solvent	3/4"	PVC	100
FP-PVCBV-100	Solvent	1"	PVC	100
FP-PVCBV-150	Solvent	1-1/2"	PVC	48
FP-PVCBV-200	Solvent	2"	PVC	24

Flow-Pro true union PVC ball valves (with both end connections)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-PVCUBV-50	Solvent/Threaded	1/2”	Grey PVC	48
FP-PVCUBV-75	Solvent/Threaded	3/4”	Grey PVC	36

Flow-Pro NSF certified grey PVC schedule 80 unions (solvent connection)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-PVCU-75	Solvent	3/4”	PVC	100
FP-PVCU-100	Solvent	1”	PVC	100

Flow-Pro forged brass ball valves (full port / threaded)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-BBVT-50	FNPT	1/2”	Forged Brass	100
FP-BBVT-75	FNPT	3/4”	Forged Brass	100
FP-BBVT-100	FNPT	1”	Forged Brass	50

Flow-Pro in-line PVC check valves (solvent connections)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-PCV-50	Solvent	1/2”	PVC	120
FP-PCV-75	Solvent	3/4”	PVC	120

Flow-Pro bronze pressure relief valves with threaded connections (adjustable 75 to 150 psi)

Part Number	Pipe Connection	Pipe Size	Material	No. Per Case
FP-PRV-50	FNPT	1/2”	Bronze	150
FP-PRV-75	FNPT	3/4”	Bronze	150

Section 9

Commercial Reverse Osmosis Systems & Accessories

R13 Compact Wall Mount RO

R-13 with optional stand

R-13 Compact Wall Mount RO

Three models for flow rates to 1200 GPD

Standard features

- Powder coated steel frames
- Inlet solenoid valve
- Pre-filter
- 1/2 HP motor
- Brass pump
- Liquid filled pre-filter pressure gauge
- 2 1/2” liquid filled pump pressure gauge
- Product water & reject water flow meters
- High pressure, non-metallic membrane housings
- SS needle valves for concentrate and recycle lines
- Stainless steel product water check valve
- On / Off toggle switch
- Low-pressure shut-off with auto restart
- Feed water and product water TDS monitor

Specifications

Feed water connection	3/4" NPTF
Product water connection	3/8” Tubing OD
Reject water connection	3/8” Tubing OD
Feed water required (max.)	2.4 GPM
Feed water pressure (min.)	10 PSI
Drain required (max.)	2.4 GPM
Electrical requirements	120 VAC 60 Hz
Amps	8
Pump (H.P.)	1/2

Proprietary Membranes
(for R-13 systems)

Options

Part Number	Description
R2868	Leg Kit
R2353-SD	Product float switch
R2288	Whole house option*

*Includes 300 gal tank, product float switch and repressurization pump with built in controls.

Applications

- Whole house
- Ice makers
- Labs
- Beverages
- Coffee shops
- Restaurants

Models

	R13-0250	R13-0600	R13-1200
Maximum production (gallons per day)	250	600	1200
Average membrane rejection rate	98 %	98 %	98 %
Recovery (adjustable)	8 - 75 %	17 –75%	34 - 75 %
Membrane size	3” x 10”	3” x 20”	3” x 20”
Number of membranes	1 (P/N R96310)	1 (P/N R96320)	2 (P/N R96320)
Pre-filter (system ships with one 5 micron cartridge)	10”	20”	20”
Dimensions, approximate (W x H x D)	26” x 26” x 9”	26” x 36” x 9”	26” x 36” x 9”
Shipping Weight, estimated (lbs.)	50	60	75

Note: Performance specifications are based on 77°F feed water, SDI < 3, TDS below 1000 ppm and pH of 8. Individual membrane productivity and rejection rates are based on manufactures specifications. Please see water temperature conversion charts for production factor. Chlorine reduction and other pretreatment may be required. Systems are designed for use with municipal and well water.

R4X40 Series Whole House RO

Three models for flow rates up to 6,600 GPD

Model: R4X40-1

Standard features

- Powder coated steel frame
- Inlet solenoid valve
- 20” prefilter
- Prefilter pressure gauge
- Multistage centrifugal pump
- Low-pressure protection with microprocessor auto reset
- 2 1/2” liquid filled pump pressure gauge
- Stainless steel pressure vessel(s)
- Product flow meter
- Reject flow meter
- Concentrate needle valve
- Non metallic recycle needle valve
- Feed water and product water TDS monitor

Applications

- Whole house
- Boiler feed water
- Humidifiers
- Greenhouses
- Process Water
- Electronics

Specifications

Membrane Size	4” x 40”
Average membrane rejection	98 %
Feed Water Connection	3/4" NPTF
Prefilter	2.5” x 20”
Product Water Connection	5/8" tubing OD
Reject Water Connection	5/8" tubing OD
Feed Water Pressure (minimum)	10 psi
Electrical Requirement *	120 VAC 60 Hz

Options

Part Number	Description
R2353-SD	Product float switch
R2288-165	165 gal tank whole house option*
R2288	300 gal tank whole house option*
R2288-500	500 gal tank whole house option*

*Includes atmospheric storage tank, product float switch, and repressure pump with built in controls.

Models

	R4X40-1	R4X40-2	R4X40-3
Maximum Productivity (gallons per day)	2200	4400	6600
Recovery (user adjustable)	15 - 75 %	25 –75%	32 - 75 %
Number Of Membranes	1	2	3
Feed Water Required (maximum)	10gpm	12 gpm	14 gpm
Drain Required (maximum)	10gpm	12 gpm	14 gpm
Motor Horse Power	3/4	1	1 1/2
Electrical Requirement*	15 amps	20 amps	25 amps
Dimensions W x D x H	20 x 20 x 50	20 x 20 x 50	20 x 26 x 50
Shipping Weight (estimated lbs)	120	150	180

Notes: Maximum production based on a feed water of 77°F, SDI < 1, 1000 ppm TDS, and pH 7. Individual membrane productivity may vary (± 15%). May be operated on other feed waters with reduced capacity. Percent Rejection is based on membrane manufactures specifications; overall system percent rejection may be less. *R4X40-3 is available only in 230-volt single phase.

R12 Series Wall-Mounted RO Systems

R12-1200-2 system with optional legs

Compact, wall-mounted systems

Four models for flow rates to 1200 GPD.

Standard features (package #1)

- Stainless steel frame
- Automatic inlet valve
- Pre-filter housing and cartridge, 10"
- Procon pump (brass)
- 1/2 HP motor
- Liquid filled pump pressure gauge (2-1/2")
- Stainless steel pressure vessels
- Needle valve for concentrate line
- Needle valve for recycle line
- Check valve for product water (stainless steel)
- Product pressure switch with Auto/Off
- Low-pressure shut-off with automatic restart

Additional features included in package #2

- Pre-filter pressure gauges
- Product water flow meter
- Reject water flow meter

Additional features included in package #3

- Automatic fast flush for concentrate

Specifications

Product water & reject water connection (tubing)	3/8"
Feed water requirement (maximum)	2.4 GPM
Feed water pressure requirement (minimum)	10 PSIG
Drain requirement (maximum)	2.4 GPM
Electrical requirement	120v/60hz
Amps	8
Pump	1/2 HP

Options

Part Number	Description
R2864	Stainless steel leg kit
R2353-SD	Product water float switch
R2288	Whole house option*

*Includes 300 gallon tank, product water float switch and repressurization pump with built-in controls.

Models

Model Number	Package	GPD	Recovery (Adjustable)	Membrane Size	Number Of Membranes	Feed Water Connection	Typical Rejection	Dimensions	Ship Wt. (lbs.)
R12-0150-1	1	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0150-2	2	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0150-3	3	150	15%-75%	2-1/2"x14"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-1	1	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-2	2	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0250-3	3	250	15%-75%	2-1/2"x21"	1	1/2" NPT	98%	22"x32"x12"	50
R12-0600-1	1	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-0600-2	2	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-0600-3	3	600	15%-75%	2-1/2"x40"	1	1/2" NPT	98%	22"x52"x12"	60
R12-1200-1	1	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70
R12-1200-2	2	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70
R12-1200-3	3	1200	25%-75%	2-1/2"x40"	2	1/2" NPT	98%	22"x52"x12"	70

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is Flow-Pro® FPMB5-978 melt blown cartridge. Systems are designed for use with municipal and well water.

R14 Series Wall-Mounted RO Systems

R14-03-BWM System

Compact, wall-mounted systems

Three models for flow rates to 5400 GPD, available with brass and stainless steel fittings. Fully assembled and ready for installation.

Standard features

- Stainless steel frame
- Stainless steel pressure vessels
- Pre-filter housing and cartridge, 10" Full-Flow
- Webtrol® multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with automatic restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge (liquid filled)
- Flow meter for product water
- Flow meter for reject water
- Check valve for product water
- Sample valve for product water
- On / off switch

Specifications

Feed water connection	1" FNPT
Product water connection (1800 & 3600 GPD)	1/2" tube
Product water connection (5400 GPD)	5/8" tube
Reject water connection (all R14 models)	1/2" tube
Feed water pressure requirement (minimum)	10 PSIG
Drain requirement (maximum)	10 GPM
Electrical requirement	230v/60hz
Amps (1800 & 3600 GPD)	6
Amps (5400 GPD)	9

Options

Part Number	Description
R2353-SD	Product water float switch
R2288	Whole house option*

*Includes 300 gallon tank, product water float switch and repressurization pump with built-in controls.

Models

Model Number	Fittings & Valves	GPD	Pump (H.P.)	Recovery (Adjustable)	Membrane Size	Membranes	Feed Water Required* (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R14-01-1WM	SS	1800	1	15%-75%	4" x 40"	1	2.5	98%	41"x51"x18"	200
R14-01-BWM	Brass	1800	1	15%-75%	4" x 40"	1	2.5	98%	41"x51"x18"	200
R14-02-1WM	SS	3600	1	25%-75%	4" x 40"	2	5	98%	41"x51"x18"	250
R14-02-BWM	Brass	3600	1	25%-75%	4" x 40"	2	5	98%	41"x51"x18"	250
R14-03-1WM	SS	5400	1.5	35%-75%	4" x 40"	3	7.5	98%	41"x51"x18"	300
R14-03-BWM	Brass	5400	1.5	35%-75%	4" x 40"	3	7.5	98%	41"x51"x18"	300

*At 50% recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is Flow-Pro® FPMB-BB5-10 melt blown cartridge. Systems are designed for use with municipal and well water.

R14 Series Floor Model RO Systems

R14-06-1131100 System

Top quality, attractively priced, fully assembled RO systems

Five models for flow rates to 10,800 GPD. Select the features you want to meet your requirements!

Standard features (package #1)

- Powder coated steel frame
- Stainless steel pressure vessels
- Pre-filter housing and cartridge (20" Full-Flow)
- Webtrol® heavy-duty multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with automatic restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge (liquid filled)
- Flow meter for product water
- Flow meter for reject water
- Flow meter for recycle water
- Check valve for product water
- On / off switch

Additional features included with package #2

- CI-1000 electronic controller with product water conductivity meter and alarm output
- Programmable concentrate auto flush

Specifications

Feed water connection	1" FNPT
Product water connection	3/4" FNPT
Reject water connection	3/4" FNPT
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	15 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	15

Models

Model Number	PACK-AGE	GPD	Pump (H.P.)	Recovery (Adj.)	Membrane Size	Membranes	Feed Water Required* (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R14-02-1111000	1	3600	5	25%-75%	4" x 40"	2	5	98%	60"x18"x56"	400
R14-02-1131100	2	3600	5	25%-75%	4" x 40"	2	5	98%	60"x18"x56"	400
R14-03-1111000	1	5400	5	36%-75%	4" x 40"	3	7.50	98%	60"x18"x56"	500
R14-03-1131100	2	5400	5	36%-75%	4" x 40"	3	7.5	98%	60"x18"x56"	500
R14-04-1111000	1	7200	5	42%-75%	4" x 40"	4	10	98%	60"x18"x56"	600
R14-04-1131100	2	7200	5	42%-75%	4" x 40"	4	10	98%	60"x18"x56"	600
R14-05-1111000	1	9000	5	46%-75%	4" x 40"	5	12.5	98%	60"x18"x56"	700
R14-05-1131100	2	9000	5	46%-75%	4" x 40"	5	12.5	98%	60"x18"x56"	700
R14-06-1111000	1	10800	5	50%-75%	4" x 40"	6	15	98%	60"x18"x56"	800
R14-06-1131100	2	10800	5	50%-75%	4" x 40"	6	15	98%	60"x18"x56"	800

*At 50% recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is Flow-Pro® FPMB-BB5-20 melt blown cartridge. Systems are designed for use with municipal and well water.

R24 Series Commercial RO Systems

Three models and two design options for flow rates up to 15 GPM.

Standard features (package #1)

- Powder coated steel frame
- FRP multi-port pressure vessels
- Pre-filter housing and cartridge (20” B-B)
- Webtrol® multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with auto restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge
- Flow meter for product water
- Flow meter for reject water
- Flow meter for recycle water
- Check valve for product water
- Sample valves for product water
- On / off switch

Specifications

Feed water connection	1" FNPT
Product water connection	1" FNPT
Reject water connection	3/4" FNPT
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	17, 21, 25 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	20

Additional features included with package #2

- CI-1000 electronic controller with product water conductivity meter and alarm output
- Programmable concentrate auto flush

Models

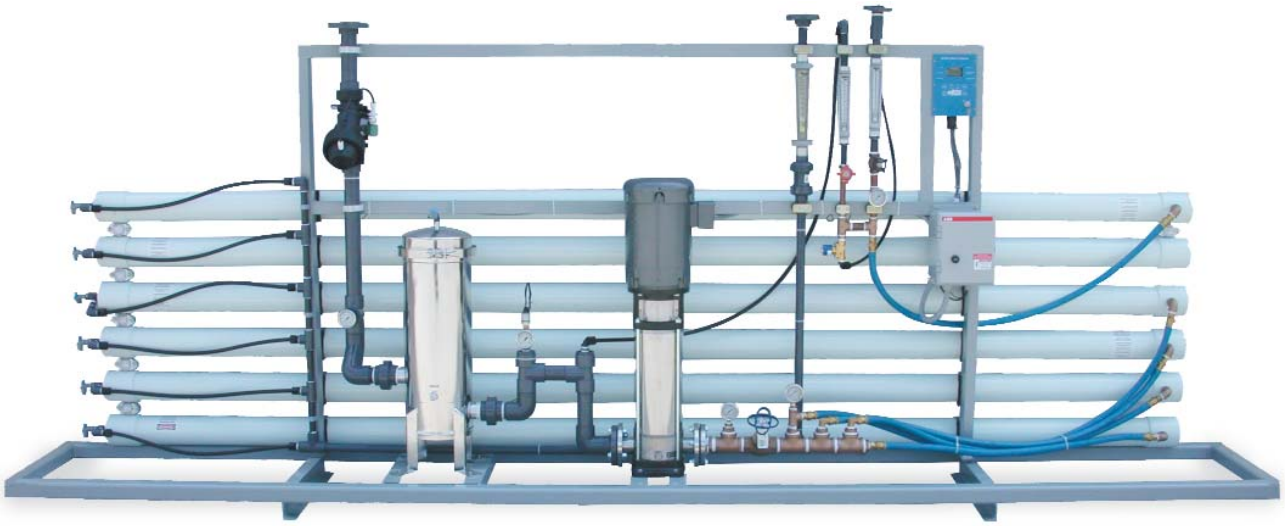
Model Number	PACK-AGE	Gallons Per Minute	Pump (H.P.)	Recovery (Adj.)	Membrane Size	Membrane Array	Feed Water Required* (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R24-08-1111000	1	10	7.5/TEFC	60%-75%	4" x 40"	2:1:1	17	98%	96"x24"x72"	800
R24-08-1131100	2	10	7.5/TEFC	60%-75%	4" x 40"	2:1:1	17	98%	96"x24"x72"	800
R24-10-1111000	1	12.5	7.5/TEFC	60%-75%	4" x 40"	2:2:1	21	98%	96"x24"x72"	900
R24-10-1131100	2	12.5	7.5/TEFC	60%-75%	4" x 40"	2:2:1	21	98%	96"x24"x72"	900
R24-12-1111000	1	15	7.5/TEFC	60%-75%	4" x 40"	3:2:1	25	98%	96"x24"x72"	1000
R24-12-1131100	2	15	7.5/TEFC	60%-75%	4" x 40"	3:2:1	25	98%	96"x24"x72"	1000

*At 65% recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is 20” Full-Flow plastic housing and Flow-Pro® FPMB-BB5-20 melt blown filter cartridge. Systems are designed for use with municipal and well water

R44 Series Commercial RO Systems

Three models and two design options for flow rates up to 30 GPM.



Standard features (package #1)

- Powder coated steel frame
- FRP multi-port pressure vessels
- Stainless steel pre-filter and cartridges
- Webtrol® multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with auto restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge
- Flow meter for product water
- Flow meter for reject water
- Flow meter for recycle water
- Check valve for product water
- Sample valves for product water
- On / off switch

Specifications

Feed water connection	2" Flange
Product water connection	1.5" Flange
Reject water connection	1" Flange
Feed water pressure requirement (min.)	10 PSIG
Drain requirement (maximum)	31, 39, 46 GPM
Electrical requirement	230VAC/60hz
Phase	3
Amps	30

Additional features included with package #2

- CI-1000 electronic controller with product water conductivity meter and alarm output
- Programmable concentrate auto flush

Models

Model Number	PACK-AGE	Gallons Per Minute	Pump (H.P.)	Recovery (Adj.)	Membrane Size	Membrane Array	Feed Water Required* (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R44-16-1111000	1	20	10/TEFC	65%-75%	4" x 40"	2:2	31	98%	192"x26"x72"	1400
R44-16-1131100	2	20	10/TEFC	65%-75%	4" x 40"	2:2	31	98%	192"x26"x72"	1400
R44-20-1111000	1	25	10/TEFC	65%-75%	4" x 40"	3:2	39	98%	192"x26"x72"	1600
R44-20-1131100	2	25	10/TEFC	65%-75%	4" x 40"	3:2	39	98%	192"x26"x72"	1600
R44-24-1111000	1	30	10/TEFC	65%-75%	4" x 40"	4:2	46	98%	192"x26"x72"	1800
R44-24-1131100	2	30	10/TEFC	65%-75%	4" x 40"	4:2	46	98%	192"x26"x72"	1800

*At 65% recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is Flow-Max® FM4X3 filter housing, constructed using 316 stainless steel and 2" MNPT pipe fittings and Flow-Pro® FPMB5-30 melt blown filter cartridges. Systems are designed for use with municipal and well water.

R48 Series Commercial RO Systems

Four models for flow rates up to 100 GPM.

Standard features

- Powder coated steel frame
- FRP multi-port pressure vessels
- Stainless steel pre-filter and cartridges
- Webtrol® multi-stage centrifugal pump
- Automatic inlet valve
- Low-pressure shut-off with auto restart
- Tank level input
- Pretreatment interlock input
- Adjustable recycle line
- Pre-filter pressure gauges
- Pump discharge pressure gauge
- Flow meter for product water
- Flow meter for reject water
- Flow meter for recycle water
- Check valve for product water
- Sample valves for product water
- On / off switch

Specifications

Feed water connection	See below
Product water connection (40 & 60 GPM)	2" Flange
Product water connection (80 & 100 GPM)	2.5" Flange
Reject water connection	1.5" Flange
Feed water pressure requirement (min.)	20 PSIG
Drain requirement (maximum)	See below
Electrical requirement	460VAC/60hz
Phase	3
Amps (based on model)	25,30,35,40

Additional features included R48 systems

- CI-2000 electronic controller with feed and product water conductivity meter with percent rejection
- Programmable concentrate auto flush

Models

Model Number	Gallons Per Minute	Feed Water Connection	Pump (H.P.)	Recovery (Adj.)	Membrane Size	Membrane Array	Feed / Drain Required* (GPM)	Typical Rejection	Dimensions	Ship Wt. (Lbs.)
R48-08-3131100	40	2" Flange	15/TEFC	65%-75%	8" x 40"	1:1	62	98%	186"x26"x72"	2500
R48-12-3131100	60	2.5" Flange	20/TEFC	65%-75%	8" x 40"	2:1	93	98%	186"x26"x72"	2800
R48-16-3131100	80	3" Flange	25/TEFC	65%-75%	8" x 40"	2:2	123	98%	186"x26"x72"	3200
R48-20-1311100	100	3" Flange	30/TEFC	65%-75%	8" x 40"	3:2	154	98%	186"x26"x72"	3500

*At 65% recovery.

Notes: Performance specifications are based on 77°F feed water, 3 SDI or less, TDS below 1000 and pH of 8. Please see water temperature conversion charts to determine actual production rate for each installation. Chlorine reduction and other pretreatment may be required. Membrane rejection rates are based on membrane manufacturer's specifications. Pre-filter is Flow-Max® FM7x4 filter housing, constructed using 316 stainless steel and 2" MNPT pipe fittings and Flow-Pro® FPMB5-40 melt blown filter cartridges. Systems are designed for use with municipal and well water.

Introduction

Watts Reverse Osmosis (R/O) Systems are designed to provide the commercial and industrial user with the most trouble free, cost effective and reliable form of water treatment available, by providing every option necessary for a successful installation.

Principles of Reverse Osmosis

Watts R/O systems employ thin film composite spiral wound membrane elements for superior performance. To simply describe the process, pump pressure is used to supply source water to reverse osmosis membranes. These special membranes allow only high quality water to permeate them. In turn, they reject metals, salts, ionic and organic impurities that are processed to waste.
Suspended solids are removed by pre-filters, which are standard components on all Watts RO systems.

Water temperature

Product water quality and production of any RO system is dependent on pressure and temperature. Watts™ RO systems are rated at standard conditions of 77˚F (25˚C), 60 psi (4.2 bar) inlet pressure and 1,000 TDS feed water quality. Higher temperatures will result in more water passing through the membranes and increased water production. As a rule, at given pressures and TDS levels, for each one-degree change in water temperature the change in water production is approximately 2%.

Water temperature		Production Factor*
°F	°C	(Using thin film membranes)
40	4	0.48
50	10	0.60
60	16	0.73
70	21	0.88
77	25	1.00
80	27	1.06
90	32	1.26

*Percent of rated production.

Water pressure

Watts® commercial RO systems require a minimum of 10 psi feed pressure to function properly. The maximum pressure is 90 psi, and a pressure regulator must be utilized over 90 psi to reduce feed water pressure.

Feed / source water inlet requirements

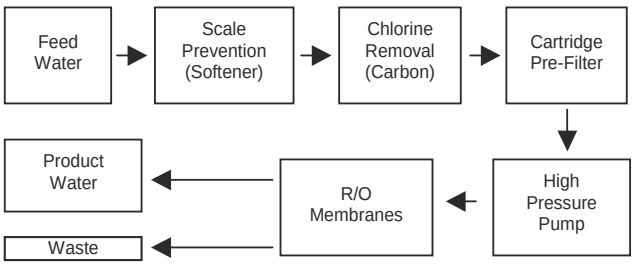
The source water requirements shown below are essential for proper operation:

Inlet feed water requirements	
Factor	**Requirement**
Hardness	<1 grain per gallon
Free chlorine	0 ppm
T.D.S.	<1,000 ppm
S.D.I.	<5
pH	3-11
Iron	<0.01 ppm
Silica	<25 ppm
Manganese	<0.05 ppm
Turbidity	<1 NTU
Temperature	40°F - 95°F (4°C - 32°C)
Pressure	10 - 90 psi (2.8 - 5.6 bar)

Note: Pretreatment may be required if the above parameters are not met. Failure to meet feed water requirements may foul membranes, void the warranty and possibly make it necessary to down-rate performance.

All specifications listed are based on an average of 1,000 TDS feed water, 77°F (25°C) temperature and 60 psi (4.2 bar) pressure. Typically, higher-pressure differentials and higher temperatures increase water production and water quality. Maximum pressure and temperature limits must be observed.

General RO Process Diagram



1. System location

The RO system should be located on a level surface in an area sheltered from sun, wind and rain. The temperature in this area should be maintained, and should not fall below 35°F, nor greater than 95°F. If these limits are exceeded, damage to components may result and the warranty may be considered void. It is important to allow sufficient space around the unit so maintenance can easily be performed.

2. Plumbing

The high-pressure pumps used require a continuous flow of water to the system. Minimum feed pressure is 10 psi. Please see table, below for minimum flow rates.

3. Feed water

Piping for feed water to the RO system should be either copper or plastic. Iron and carbon steel pipe will increase the iron content of the raw feed water and adversely affect the RO system's performance. Temperature of the feed water must not exceed 95°F.

4. Product water (permeate) line connection

Connect the product water (permeate) line to the manifold on the back side of the system. This line should not have valves and should run as directly as possible to the storage tank.

5. Concentrate (waste) line connection

Connect the waste line (concentrate) to the manifold on the back side of the system. The waste from the system should not have valves and should have an air break between it and the building drain system. The tubing or piping used for discharge of the concentrate should be run to an open drain in a free and unrestricted manner.

6. Electrical

The customer must provide a properly sized electrical service.

Level controls

In most installations it is necessary to use the level switch connector wire to install a level control or an electrical switch to turn the RO system on and off based on the water level in the storage tank.

Pumps

Never let pumps run dry. Operating pumps without sufficient feed water will cause damage. Feed pumps with filtered water only.

Pre-filtration

All Watts® RO systems come with particulate pre-filters to remove suspended particles down to five (5) micron in size. Change pre-filter cartridges at least every month or when there pressure differential of 10% or more that start-up pressure differential with clean cartridges.

Limited warranty

Watts® Commercial Reverse Osmosis systems are warranted to the original purchaser to be free of defects in material and workmanship for a period of one year from date of shipment. Should defects occur, Watts will repair or replace parts, which are defective. Shipping and labor costs are excluded for this limited warranty, and these costs are the customer's responsibility. Normal wear, accident, abuse, misuse, unauthorized alteration or repairs are also excluded. Watts will not be responsible for any incidental or consequential damages, losses or expenses arising from the installation or use of a Watts system. For warranty issues please call your dealer or Watts Water Quality & Conditioning Products at 800-659-8400.

Commercial RO Membranes

Top quality membranes for commercial reverse osmosis systems.

Watts® commercial membranes

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
W-2521-TW	Tap water	2-1/2"	21"	300	1
W-2540-TW	Tap water	2-1/2"	40"	800	1
W-4021-TW	Tap water	4"	21"	1,050	1
W-4040-TW	Tap water	4"	40"	2,200	1
W-4040-BW	Brackish water	4"	40"	2,200	1

Note: Watts commercial membranes are packaged in preservatives. Keep in cool environment if stored for prolonged periods of time.

Watts membrane specifications

Data	W-2521-TW	W-2540-TW	W-4021-TW	W-4040-TW	W-4040-BW
Membrane type	TFC	TFC	TFC	TFC	TFC
Material	Polyamide	Polyamide	Polyamide	Polyamide	Polyamide
Charge	Negative	Negative	Negative	Negative	Negative
Configuration	Spiral-wound	Spiral-wound	Sprial-wound	Spiral-wound	Sprial-wound
Salt rejection	99.5%	99.5%	99.5%	99.5%	99.5%
Max. operating temp.	113°F / 45°C	113°F / 45°C	113°F / 45°C	113°F / 45°C	113°F / 45°C
Max. operating pressure	400 psi	400 psi	400 psi	400 psi	600 psi
Maximum turbidity (NTU)	<1	<1	<1	<1	<1
Max. SDI	<5	<5	<5	<5	<5
pH range (cleaning)	2-11	2-11	2-11	2-11	2-11
Flux (GPD)	300	800	1,050	2,200	2,200

Note: Tap water membrane specifications are based on 225 psi pressure and 77°F temperature.

Filmtec® by Dow® commercial membranes for tap water

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
TW30-2514	Tap water	2-1/2"	14"	170	1
TW30-2521	Tap water	2-1/2"	21"	300	1
TW30-2540	Tap water	2-1/2"	40"	660	1
TW30-4014	Tap water	4"	14"	480	1
TW30-4021	Tap water	4"	21"	900	1
TW30-4040	Tap water	4"	40"	2,200	1

Note: Specifications are based on 225 psi pressure and 77°F temperature.

Filmtec® by Dow® commercial membranes for brackish water

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
BW30-2540	Brackish water	2-1/2"	40"	660	1
BW30-4040	Brackish water	4"	40"	2,200	1
BW30-400	Brackish water	8"	40"	10,500	1

Note: Brackish water membrane specifications are based on 225 psi pressure and 77°F temperature.

Filmtec® by Dow® commercial membranes for sea water

Part Number	Application	O.D.	Length	Capacity (GPD)	No. Per Case
SW30-2514	Sea water	2-1/2"	14"	100	1
SW30-2521	Sea water	2-1/2"	21"	200	1
SW30-2540	Sea water	2-1/2"	40"	540	1
SW30-4021	Sea water	4"	21"	600	1
SW30-4040	Sea water	4"	40"	1,500	1
SW30-8040	Sea water	8"	40"	6,000	1

Accessories for Commercial RO Systems

Liquid level controls, pressure switches & metal pressure tanks.

Liquid level controls

Float switch used with atmospheric storage tanks to shut-off system when tank is full.

Part Number	Description
L75222	Control with single stage suction and 1/2" NPT PP fittings.

Important:
Install level control so the float will hinge upward (as shown). Not downward.

Pressure switch

Used with bladder pressure tanks to shut-off system with tank is full.

Part Number	Description
U217-2E	Switch pre-set 30-60 psi with 1/4" NPT fittings.

Metal storage tanks

Pressure tanks with bladders from 14 to 119 gallons capacity.

Note: Tanks are polypropylene lined for compatibility with RO water. Bladders are Butyl.

Metal storage tanks (packaged one per carton)

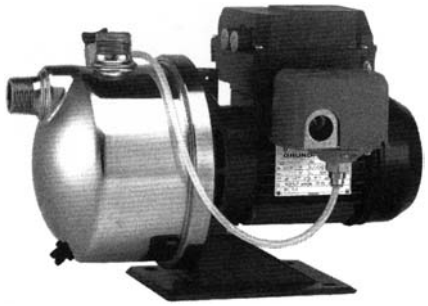
Part Number	Volume (Gals.)	Diameter	Height	Color	Pipe Fittings	Ship Weight (Lbs.)
FRO-1070-BL	14	15"	23"	Blue	1"	24
FWR-60	20	16"	29"	Blue	1/4"	36
FWR-100	32	21"	28"	Blue	1"	54
FWR-140	44	21"	36"	Blue	1-1/4"	67
FWR-260	85	26"	45"	Blue	1-1/4"	121
FWR-360	119	26"	60"	Blue	1-1/4"	153

Elbows

Part Number	Description	Size
FM412-010	PVC 90° elbow	1"
FM412-012	PVC 90° elbow	1-1/4"

Booster Pumps

Ideal for re-pressurization with commercial RO systems.



Grundfos

Booster, jet and shallow well pumps in stock for immediate shipment

Model Number	Mfg.	Type	Material (Housing)	Pipe (Suct.)	Pipe (Disch.)	H.P.	Volts	Hz	Phase	Amps (Max.)	Ship Wt.
FMG1	Grundfos	Jet	SS	1”	1”	1/2	115V	60	1	7.6	24
FMG2	Grundfos	Jet	SS	1”	1”	1/2	230V	60	1	3.7	24
FMG3	Grundfos	Jet	SS	1”	1”	1	115V	60	1	13.6	30
FMG4	Grundfos	Jet	SS	1”	1”	1	230V	60	1	7.0	30

Note: Pumps listed above are self-priming after pumps are initially filled with water.

Atmospheric Storage Tanks

Features & benefits

- Free standing vertical tanks
- Flat bottoms
- Manufactured from sturdy polypropylene
- U.V. inhibitors added
- Ideal for indoor or outdoor installations
- Ideal for liquids up to 1.7 specific gravity
- Tank walls are translucent for level viewing
- Gallon indicators on sidewalls

Models

Part No.	Capacity (Gals.)	Dimensions (Dia. X Ht.)	Lid	Bulkhead Fittings	Weight (Lbs.)
AST-75	75	23”X50”	5”	1”	28
AST-100	100	28”X42”	5”	1”	36
AST-160	160	28”X66”	8”	1”	56
AST-300	300	35”X77”	8”	2”	82
AST-500	500	46”X76”	8”	2”	118
AST-1000	1,000	64”X81”	16”	2”	250

Section 10

Company Information

Terms & Conditions of Sale

Initial, Minimum and COD Orders

The initial order to open an account is $500, and $50 to order by credit card. The minimum order is $50. Watts Water Quality & Conditioning Products (Watts Water) reserves the right ***to accept or reject an order request.*** Possession of a price sheet or a product catalog shall not be construed as an offer to sell the product listed. ***Watts Water sells wholesale only and does not sell to end-users.*** These terms and conditions shall be considered a part of all accepted orders and accepted purchase orders. COD orders will not be accepted.

Open Account

To establish an open account, a complete credit analysis is required. This involves correspondence with you, your suppliers, and your bank. The time involved depends on the response time from the references you give us. You will be notified when your credit is approved. In the interim, all orders must be shipped Prepay. Terms are net 30 days and subject to service charge of ***1.5% per month on all past due amounts.***

Payment Terms, Domestic Customers

Orders are pre-pay unless a General Open Account has been established and is in good standing. Pre-pay payments are arranged by credit card, bank wire transfer, check or check-by-fax, phone. Customers must report any disputed amount on invoice by fax within 10 days of invoice. Pending adjustment, the amount invoiced, less disputed amount remains due and must be paid within terms.

Payment Terms, International Customers

Payments are due in U.S. dollars by ***Advance Payment***, by bank wire transfer or credit card, covering merchandise and any prepaid freight.

Shipment

All shipments are F.O.B. shipping point, and shipping costs are the ***customer's responsibility***. Hazardous materials may require ***additional freight charges. Additional time is required*** on special orders, large orders, or items not stocked. Out of stock items are back ordered and shipped when received. Watts Water is not responsible for delays due to conditions beyond our control. ***Orders will be delayed*** or not processed where accounts are found delinquent and no arrangements have been made with Credit Department to settle account. Note we do not inventory all products at all distribution centers, and some shipments may be made from other locations, depending on product availability.

Damaged Merchandise

Watts Water is not responsible for damage or loss to a shipment by a freight carrier. Check shipments for damage before acceptance or note on freight bill ***"subject to inspection for concealed damage."*** Consignee is responsible for filing a claim with the freight carrier for any and all damages or loss. Return of damaged goods will not be authorized.

Limited Warranty

Most Watts Water products come with a limited warranty covering materials and workmanship. Some products sold by Watts have no warranty, or they are covered by the original manufacturer's warranty. Please contact Watts Water and refer to our Limited Warranty information for more details.

Defective Goods & Warranty Processing

An item returned for warranty consideration without prior authorization will be refused. Call Watts Water for an RGA (returned goods authorization) number. Watts Water and its manufacturers reserve the right to ***repair or replace*** defective merchandise. If pre-warranty replacement merchandise has been sent and the warranted goods are repairable, the repaired product will be returned to you at our expense and the pre-warranty invoice will be for your account. If the warranted product is not repairable, an offsetting credit invoice will be issued to your account. If the warranty consideration is denied, all expenses are for your account.

Returns

Call Watts Water for an RGA (returned goods authorization) number. Freight / shipping must be prepaid. An RGA not used in 30 days will expire. A return after that will be refused and invoice will be payable within terms. Special order goods are not returnable. A twenty-five (25%) percent restocking charge may apply to authorized returns.

Cancellation or Change Orders

Orders are processed as they are received. Once an order is in process (or production), add-ons (or change orders) may hold up shipment of the original order (or build), or may be shipped as a separate order. Buyer's add-ons, change orders are subject to Watts Water acceptance. Cancellations are subject to Watts Water acceptance and may incur a restocking fee.

Verbal Orders

We ask our customers to place all orders in writing. Verbal orders (and verbal changes to orders) will be accepted only with the understanding Watts Water is not responsible to cover freight charges for returned merchandise, placed by verbal order. Furthermore, all merchandise returned for credit placed on a verbal purchase order is subject to a twenty-five (25%) percent restocking charge, unless confirmation has been received during office hours, prior to shipment.

Deposit for Custom Products and Products Made to Order

Custom products, including all package filtration systems, standard and non-standard reverse osmosis equipment made to order, industrial filter housings and other products made to order require a deposit before orders may be accepted. (Please contact our customer service department for a copy of our deposit schedule.) Furthermore, this ***equipment cannot be returned,*** under any circumstances.

Prices

Products are sold at prices currently in effect at time of order, and are F.O.B. shipping point. Prices generally coincide with dated, Watts Water printed price sheets and web site information, however we reserve the right to change prices at anytime ***without notice and without updating published material*** at our web site or in print.

Policy

The terms and conditions described above supersede any previously written terms and conditions that appear in company documents. Watts Water Quality & Conditioning Products must authorize any changes to our terms and conditions.

Return Goods Policy

1. Customers are to provide the following information:

    1. Contact name
    2. Company name
    3. Customer Number
    4. Products to be returned and reason for the return
    5. Customer's P. O. number, under which the goods were purchased (if issued)
    6. Watts® invoice number, under which the goods were purchased

2. Requests for returns must be approved by the Return Goods Administrator, and only the RGA Administrator shall issue Return Goods Authorizations.

3. No products may be returned, nor shall credits be processed until written approval has been issued by the Watts® Water Quality Products RGA Administrator.

4. Transportation costs and risk of damage or loss in transit are the customer's responsibility.

5. Goods return for credit or refund, **including goods returned for inspection under warranty,** must be shipped to the warehouse by **prepaid** transportation. No "collect" shipments will be accepted.

6. Customers should not return merchandise without a Return Goods Authorization has been issued. Please note RGA numbers on the shipping label for proper processing, and include a copy of the RGA form inside the shipping carton for prompt attention.

7. Products not currently offered for sale, as standard will not be accepted for credit.

8. Only salable goods may be returned.

9. Custom products, such as backwashing filters, filtration systems and commercial softeners may not be returned.

10. Commercial and residential RO systems, which have been installed may not be returned under any circumstances.

12. Authorized credits will be issued at the price paid, less a twenty-five (25%) percent restocking charge plus repackaging costs (if necessary).

Important

If customers claim returns are due to company error, the burden of proof is the customer's responsibility. If the matter cannot be resolved by telephone, customer may elect to return merchandise by prepaid freight for inspection, so the matter may be further investigated.

If company agrees we are in error, return freight costs will be credited or refunded to customer.

Sample Policy

Requests for samples may be made as follows:

1. $50 order minimum will not apply for reasonable sample requests.
2. All orders for samples will be invoiced, including freight costs.
3. Standard payment terms shall apply.
4. Samples may be returned for credit, if returned within 60 days of shipment.
5. Samples returned for credit must be shipped freight prepaid.
6. No credits will be issued for samples, which cannot be resold.
7. Credits will be issued for authorized sample returns, less freight costs.
8. To expedite any returns, please use Return Goods Request Form.

Temperature Ratings & Chemical Compatability Chart

Material	Max. Temp		Resistance To				
	F	C	Mineral Acids	Organic Acids	Alkalines	Organic Solvents	Oils & Petro.
Filter media:							
Polypropylene	200˚	93˚	Good	Excellent	Excellent	Excellent	Excellent
Cotton	250˚	121˚	Poor	Good	Good	Excellent	Excellent
Nylon	275˚	135˚	Poor	Fair	Good	Excellent	Excellent
Fiberglass	750˚	399˚	Excellent	Excellent	Poor	Excellent	Excellent
Polyester	275˚	135˚	Good	Good	Fair	Excellent	Excellent
Gasket material							
Buna-N	250˚	121˚	Poor	Poor	Poor	Varies	Excellent
EPDM	300˚	149˚	Excellent	Excellent	Excellent	Poor	Poor
Viton	400˚	204˚	Excellent	Excellent	Poor	Excellent	Excellent
Center tubes:							
Polypropylene	200˚	93˚	Good	Excellent	Excellent	Excellent	Excellent

Note: Information from industry sources. End user is responsible to determine suitability for each application.

Relative Size of Particles

Substance	Micron
Table salt	100
Human hair	50-70
White blood cell	25
Talcum powder	10
Cocoa	8-10
Red blood cell	8
Bacteria	2
Cysts	3-5

Conversion Chart

U.S. Standard Mesh	Opening		Micron
	MM	Inches	
100	.147	.0058	147
140	.104	.0041	104
200	.074	.0029	74
230	.061	.0024	61
325	.043	.0017	43
400	.038	.0015	38

Conversion Factors

Multiple	By	To Obtain
Atmosphere	14.7	PSI
Bar	14.2	PSI
Centimeters	0.3937	Inches
Cubic Feet	28.32	Liters
Cubic Inches	16.39	Cubic Centimeters
Cubic Meters	35.31	Cubic Feet
Cubic Meters	264.2	U.S.Gallons
Feet	30.48	Centimeters
Feet	0.0348	Meters
Gallons, U.S.	3.785	Liters
Gallons, Imperial	1.20095	U.S. Gallons
Inches	2.540	Centimeters
Inches	25.4	Millimeters
Kilograms	2.205	Pounds
Liters	0.2642	Gallons, U.S.
Meters	3.281	Feet
Meters	39.37	Inches
Millimeters	0.03937	Inches
Ounces (fluid)	0.02957	Liters
Pounds	453.5924	Grams
PSI	0.07	Bar
Square Inches	654.2	Square Millimeters
Square Meters	10.76	Square Feet
Tons (metric)	2205	Pounds
Yards	0.9144	Meters

Temperature Conversion:

C to F = C + 17.78 x 1.8 = F
F to C = F - 32 x 5/9 = C

Other:

Lbs. divided by 2.2 = Kilograms

Hang your hat here!

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